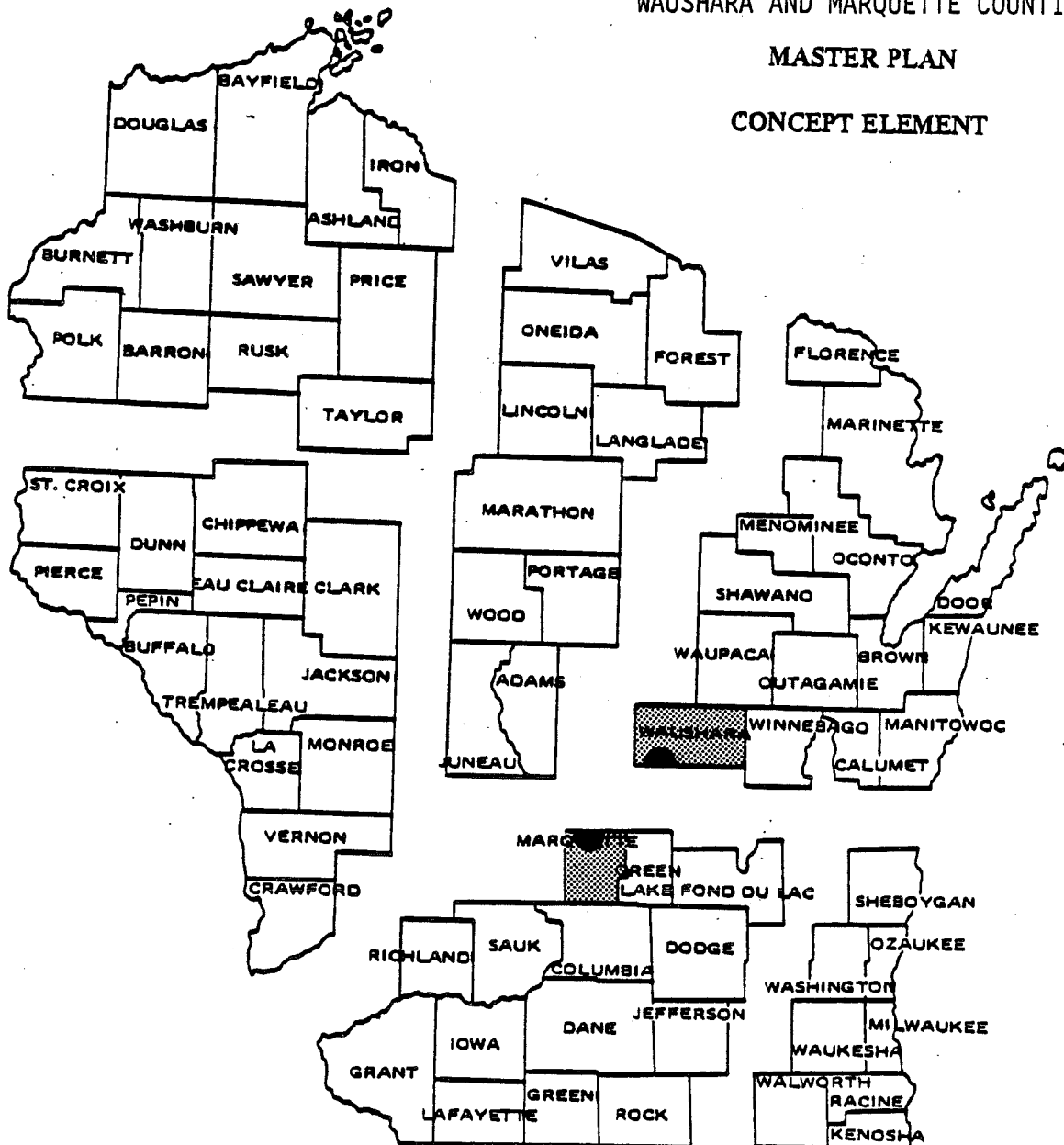


X Copy

MECAN RIVER SYSTEM FISHERY AREA
WAUSHARA AND MARQUETTE COUNTIES

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

Leader - Dale Brege - Fish Manager - Montello
Mike Primising - Fish Manager - Wautoma
Jim Kronschnabel - Forester - Montello
Alex Katovich - Forester - Wautoma
Tom Hansen - Wildlife Manager - Berlin
Tom Howard - Wildlife Manager - Wautoma
Elward Engle - Land Agent - Wautoma

Approved by Natural Resources Board

1-23-85

Date

PORTAGE CO.

MARQUETTE CO. LEGEND

- | | | |
|--|--|--|
| Portland Canal

Blaine Entrance

Burnham

Grant

Earth

Fire Lane

Multitools Divided

Fireway

Interchange

Highway Separation

Interstate Highway No. 60
 | U.S. & STATE
COUNTY

U.S. Highway No. 41

State Highway No. 13

City or Town Boundary

County Boundary

Corps of Engineers

Not a State Facility

Airport

Fire Highway
 | Gas Farm

County Seat

Unincorporated Village

Schools

Public Heat or Fish Sale

Hospital

Ranger Station

Public Camp & Picnic Grounds

State Park

Without Campsites

With Facilities

County Park

Without Facilities

With Facilities

Wayside

Wild Facilities
 |
|--|--|--|
- *Surface types on farm roads not shown

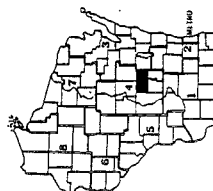
- Surface types on lawn roots not shown

CIVIL TOWNS						
PLAINFIELD	DANFORTH	MOUNT MORRIS	LEON	BLOOMFIELD	FOR SYDNEY	AURORA
OAKS	ROSE	SPRINGMEAD	SAXEVILLE			
DEERFIELD	MANCOCK	RICHMOND				
COLUMA						

MARQUETTE CO. GREEN LAKE CO.

GREEN LAKE CO.

Land Area.....	623 Sq. M.
Population.....	14,259
Co. Seal.....	Walters





TOWNSHIP NUMBERING	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
--------------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

WAUSHARA CO.
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS
STATE OFFICE BUILDING

Madison, Wisconsin

0 1 2
MILE SCALE

 JAN. 1976 
 compiled from U.S.G.S. Quadrangles
 based on Aerial Photographs

† Grid based on Vincentian coordinate system, south-central zones.

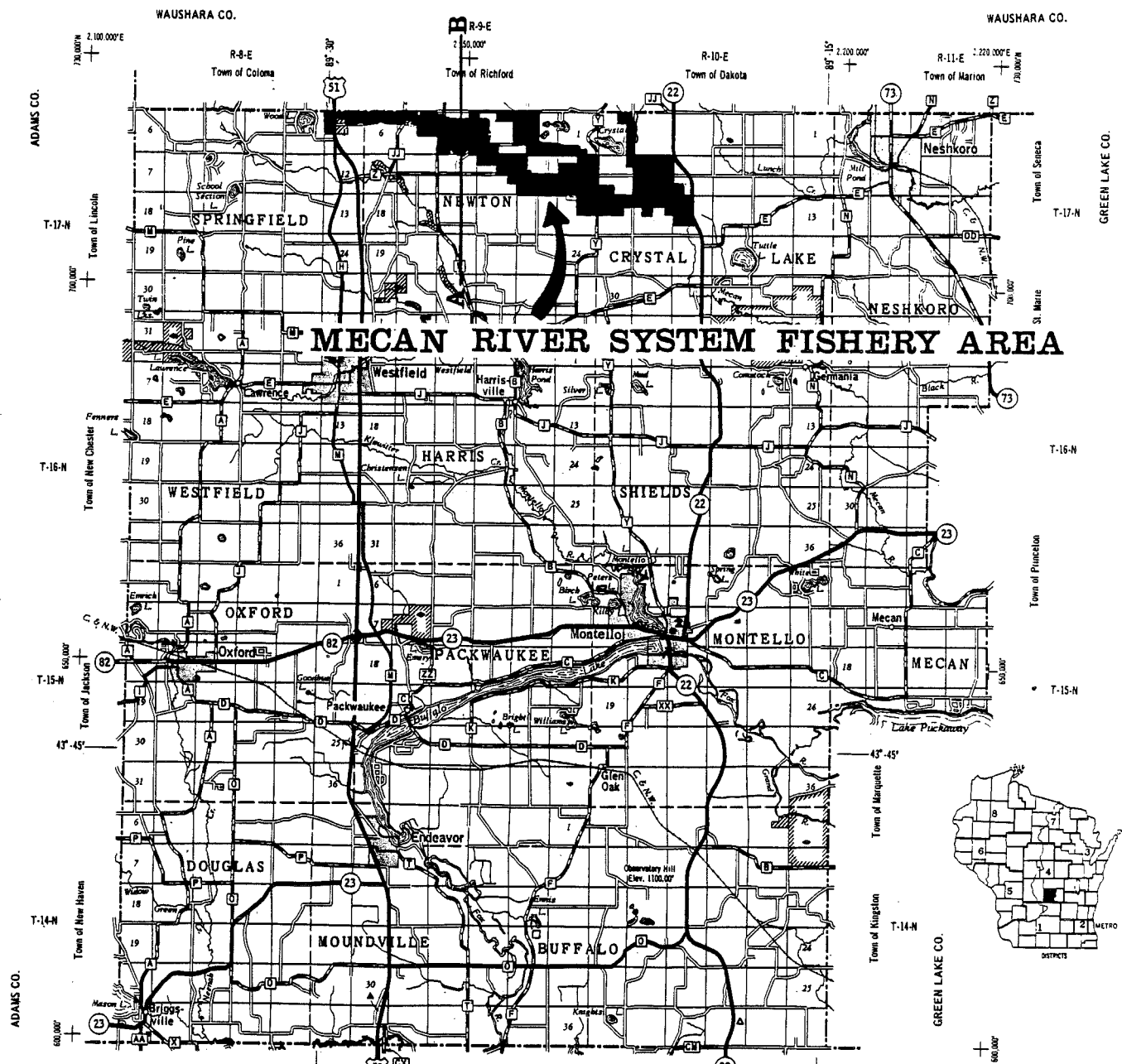


Figure 1b. Location—Mecan River System Fishery Area, Waushara and Marquette Counties.

U.S. STATE	COUNTY
Portland Cement	
Gravel	
Earth	
State Road	
Fire Lane	
Multilane Divided	
Freeway	
Interchange	
Highway Separation	
Interstate Highway No.	
U.S. Highway No.	
State Highway No.	
County Hwy. Letter	
Railroad	
Dam	
State Boundary	
County Boundary	

Civil Town Boundary	
Corporate Limits	
Nat. & State Forests	
Airport	
Fish Hatchery	
Game Farm	
County Seat	
Unincorp. Village	
Schools	
Public Hunt or Fish Gr.	
Hospital	
Ranger Station	
Public Camp & Picnic Gr.	
State Park	
County Park	
Wayside	

SPRINGFIELD	NEWTON	CRYSTAL LAKE	NESHKORO
WESTFIELD	HARRIS	SHIELDS	MECAN
OXFORD	PACKWAUKEE	MONTELLA	
DOUGLAS	MOUNDVILLE	BUFFALO	

Land Area 457 Sq. Mi.
Population 8,367
Co. Seat Montello

TOWNSHIP NUMBERING
6 5 4 3 2 1
7 8 9 10 11 12
18 17 16 15 14 13
19 20 21 22 23 24
30 29 28 27 26 25
31 32 33 34 35 36

WILES OF HIGHWAY
as of Jan. 1, 1975
STATE 87
COUNTY 227
LOCAL ROADS 517
OTHER ROADS 6
TOTAL FOR COUNTY 837

MARQUETTE CO.
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OFFICE BUILDING
Madison, Wisconsin
SCALE 0 1 2 MILES
Corrected for
JAN. 1976
Compiled from U.S.G.S. Quadrangles
Based on Aerial Photographs

* Surface types on town roads not shown.

+ Grid based on Wisconsin coordinate system, south zone.

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SECTION I - ACTIONS

GOALS, ANNUAL OBJECTIVES AND ANNUAL ADDITIONAL BENEFITS

Goals

To purchase land, and to preserve and enhance the Mecan River System Fishery Area in Marquette and Waushara Counties for trout fishing and other recreational and educational activities that are consistent with maintaining an aesthetically pleasing area.

Annual Objectives

1. Provide opportunities for 17,150 participant days of fishing for brown, brook, and rainbow trout with an average catch of 0.7 trout per fishing hour.
2. Manage the area to allow 4,150 participant days of archery deer hunting, 3,750 days of gun deer hunting, 3,500 days of ruffed grouse hunting, 3,500 days of squirrel hunting, 2,000 days of waterfowl hunting, and 2,000 days for cottontails, raccoon, and woodcock.
3. Manage the area to allow 4,500 participant days of trapping for muskrat, raccoon, fox, beaver, otter, and mink.
4. Maintain a refuge area for giant Canada geese providing 75,000 goose-use days.
5. Manage the timber resource to create a variety of habitat types and provide for a harvest of 250 cords of pulpwood and fuelwood.
6. Maintain 6 public use natural areas totalling 157 acres within the boundary.

Annual Additional Benefits

1. Provide 7,000 participant days of other recreational and educational uses including sightseeing, berry and nut picking, photography, hiking, cross-country skiing, canoeing, bird watching, and snowmobiling.
2. Benefit a variety of nongame species native or migratory to the area.
3. Contribute to the habitat of migratory endangered and threatened species.

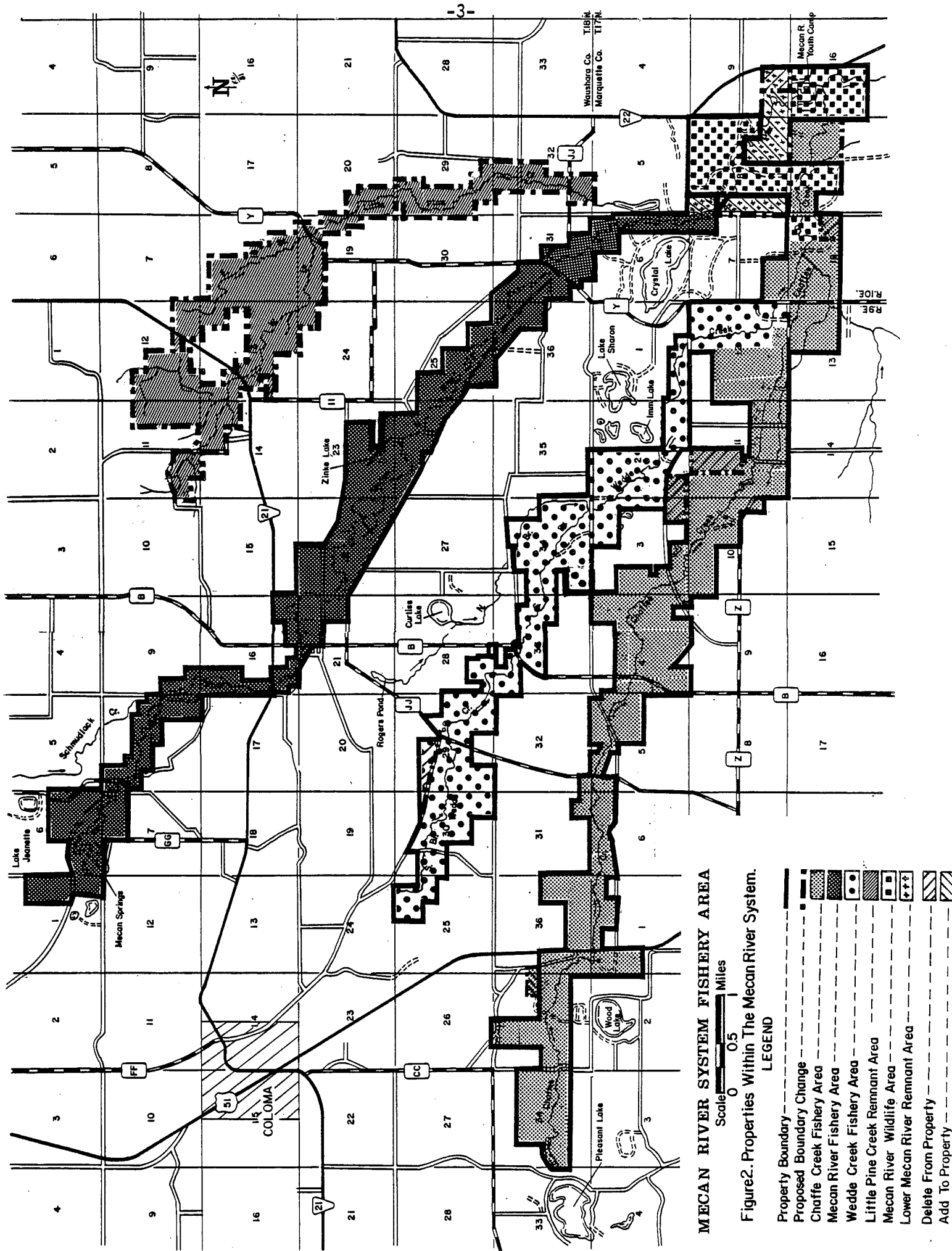
RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

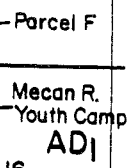
Currently 3 approved fishery areas, an approved wildlife area and a remnant area exist on a complex of major trout streams (Figure 1) that drain into the Mecan River. They are the Mecan River, Chaffee Creek and the Wedde Creek Fishery Areas in Waushara and Marquette Counties, the Mecan River Wildlife Area in Marquette County, and a remnant area on Little Pine Creek in Waushara County. Approval is requested to combine the various areas into a single

Mecan River System Fishery Area (Figure 2) for the long range acquisition, development and maintenance of lands and public waters as outlined in this master plan.

Approval is also requested of the Natural Resources Board to modify the combined previously approved boundaries of the Mecan River System Fishery Area as shown in Figures 3a. and 3b.. To establish this proposed boundary, the following actions will be necessary:

1. Expand the Chaffee Creek boundary to include the 160 acres shown as Parcel A, Figure 3b. This property contains approximately 3,200 feet of valuable Class II trout stream frontage.
2. Delete several non-essential parcels of the Chaffee Creek property which include: 40 acres shown as Parcel B, 80 acres shown as Parcel C, and 80 acres excepting the 3 rod right-of-way to the property boundary shown as Parcel D, all shown in Figure 3b.
3. Expand the Chaffee Creek boundary to include 30 acres of spring areas shown as Parcel E, Figure 3a.
4. Expand the Mecan River boundary to include 160 acres shown as Parcel F, 101 acres shown as Parcel G, and 40 acres shown as Parcel H, all shown in Figure 3b. These parcels contain approximately 4,000 feet of stream frontage.
5. Delete 44 acres shown as Parcel I, Figure 3a, presently within the Wedde Creek boundary. This parcel contains no stream frontage, is separated by a blacktop road from the rest of the property, and has been traded to a private landowner in exchange for other stream frontage land on Chaffee Creek.
6. Establish a property boundary on Little Pine Creek, currently a remnant, to become part of the proposed Mecan River System Fishery Area. Currently, there are 379.75 remnant acres under state ownership on this stream. It is proposed to create an acreage goal on this stream of 636.1 acres or 256.35 acres over the current remnant acres owned.
7. Transfer 636.1 acres from Waushara County remnant acres to the Mecan River System Fishery Area.
8. Reduce the acreage goal of Waushara County remnant acres by 636.1 acres.
9. Establish a Little Pine Creek Fishery Area, Waushara County.
10. Establish the acreage goal of the Mecan River System Fishery Area at 5,944.7 acres.
11. Acknowledge a modification of the property boundary which cannot be clearly defined on Figures 2 and 3b and includes the 20 acres shown as an indentation along the east boundary of the Mecan River, to Zinke Lake in the SE1/4 of Section 23, Township 18 north, Range 9 east.





Preferably, all parcels should be purchased in fee title, but acquisition in perpetual easement will be considered, if the landowner will consider only that method. Future land acquisition priority will be given to those parcels which contain significant stream frontage and to parcels with a high development potential which, if owned by private interests, could seriously detract from recreational and aesthetic values of neighboring state-owned lands.

Parcels with valuable improvements would have low priority for acquisition. However, the purchase of dwellings and buildings and their subsequent resale may be necessary to obtain acquisition of desired lands. Parcels with buildings of low value would be purchased and the buildings removed. Although substantial amounts of agricultural lands exist within the boundary, their purchase is expected to be minimal. If agricultural land is purchased, it will be traded for other lands within the boundary or retained. If retained, it will be seeded down or share-cropped.

Acquisition should take place as soon as the present landowners are willing to sell and funds are available. All land acquisition has been, and will continue to be, from willing sellers.

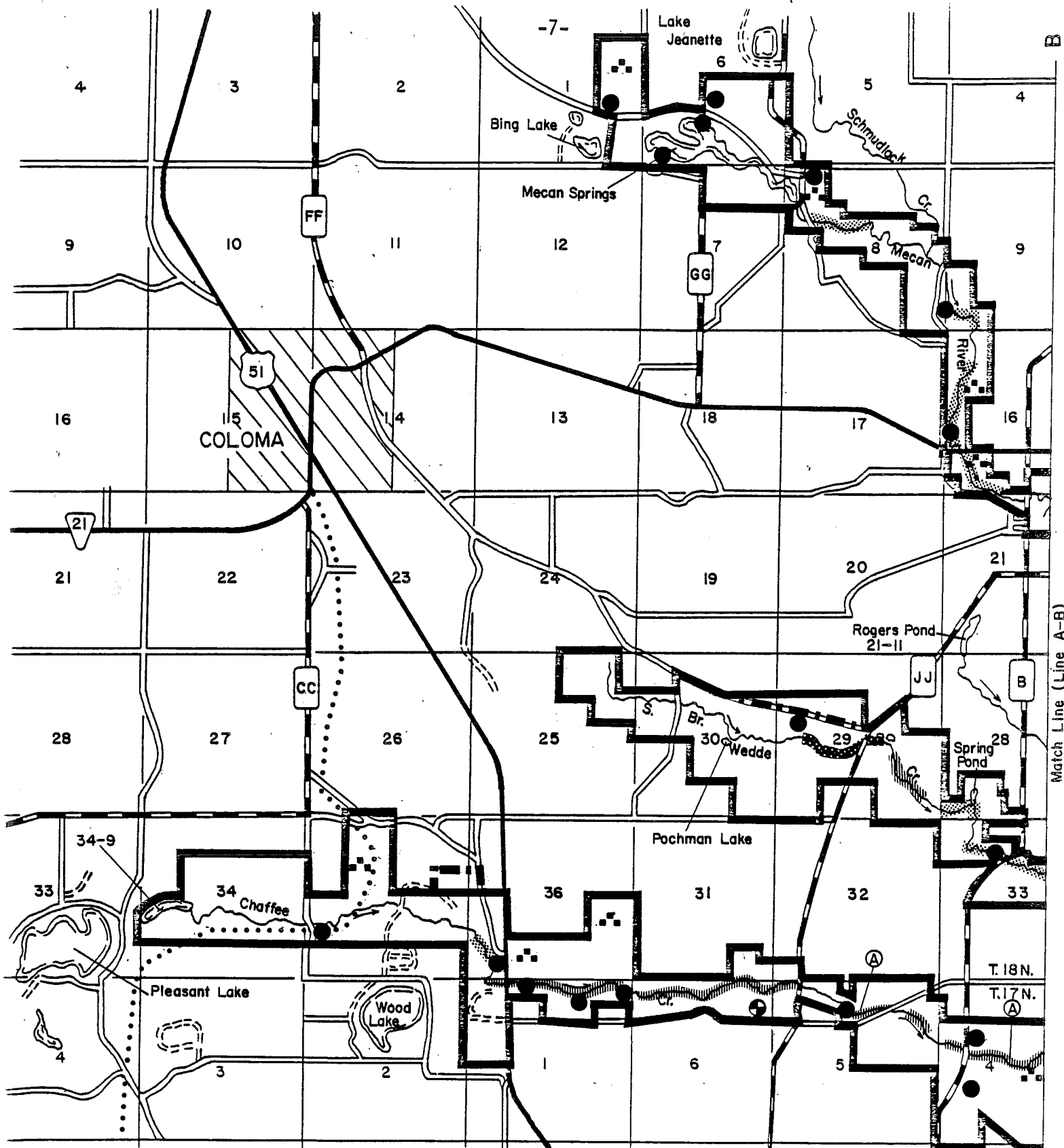
If the system acreage goal recommended by this task force is approved, then acquisition is 81.8% complete. The remaining acreage of 1,079.72 acres is estimated to cost \$1,079,720 (\$1,000/acre-1984 dollars) and take 25 years to acquire.

The overall goal recommended by the master plan task force is to protect and preserve the natural aesthetics of the fishery area while providing a high level of outdoor recreational opportunity. The management and development program calls for limited improvements of the property.

Thus, state ownership will not only assume proper management of the lands and water forever, but with the inevitable human demand from increased populations in the future, will prevent the breakdown of large private parcels of land into small recreational lots. State ownership will also be non-polluting and does not contribute to excessive fertility of the streams.

Trout habitat development will be conducted on the Mekan River system. Improvements would generally be more intense on the upper stream sections. Excellent natural reproduction occurs throughout the upper reaches of each stream. Unstable banks and lack of hiding cover are the major factors limiting the trout fishery. Instream habitat development has been completed on 3.6 stream miles on the Mekan, South Branch, Wedde and the Chaffee. Additional development is proposed for 12.8 miles as shown in Figures 4a and 4b. This work will include brushing, boom covers, deflectors, half-logs, brush bundles, bank stabilization, and artificial spawning beds. It is estimated that it will take 20 years to complete the proposed work. Currently, beaver are not a problem on the system, except at the Crystal Lake outlet. However, that could spill out to the rest of the stream and would require control measures and possible restoration of habitat.

The cost of habitat development is estimated at \$270,000. This estimate assumes that development would cost approximately \$12.00 per foot (average 1984 costs) and would involve approximately 1/3 of the lineal footage of stream throughout the 12.8 miles of proposed improvement areas.



Match Line (Line A-B)

MECAN RIVER SYSTEM FISHERY AREA

(Map 1 of 2 Maps) Scale 0 2112 4224 Feet

Figure 4a. Existing and Planned Development Map.

LEGEND

- | | | | |
|---------------------------|-------|------------------------------|-------|
| Property Boundary | ----- | Existing Wildlife Shrubs | ----- |
| Proposed Boundary | ----- | Existing Stream Hab. Improv. | ----- |
| Existing Parking Area | ----- | Proposed Stream Hab. Improv. | ----- |
| Existing Snowmobile Trail | ----- | Existing Brushing | ----- |
| Proposed Parking Area | ----- | Proposed Art. Spawning Area | ----- |

(T.17-18N-R8-9-10E.
Montell, Oxford,
Richford & Wautoma
Quad. Maps)

R.8E.
R.9E.

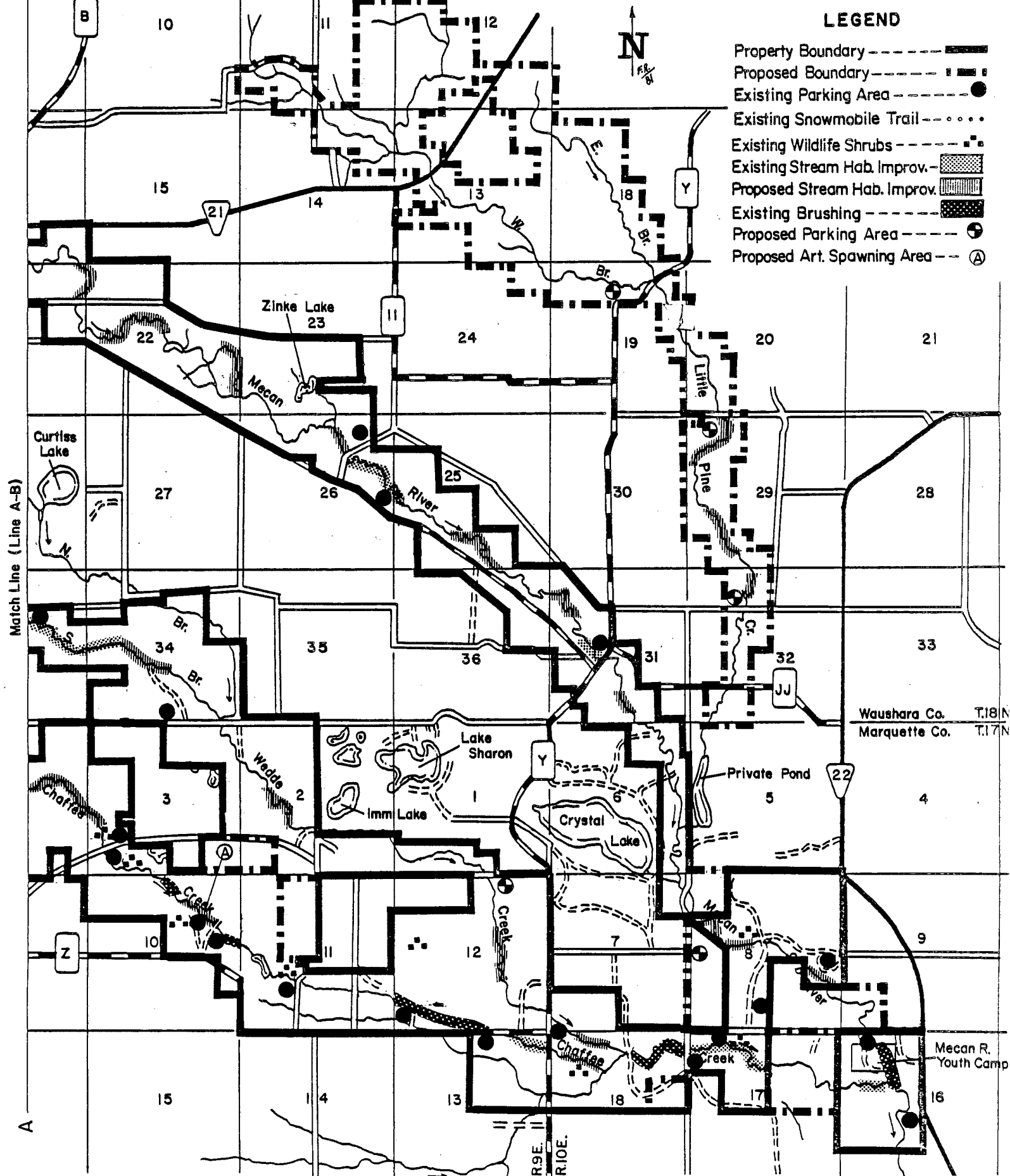
18

17

16

A

Figure 4b. Existing and Planned Development Map.



Habitat development will be conducted on those lands already owned by the Department as funding becomes available. Improvements should begin on the previously private lands as soon as possible after they have been acquired by the State.

Access to the property will be provided by 42 parking lots of which 36 are established and 6 will be new. Each new parking lot will have room for 5-10 cars and cost an estimated \$600. The parking areas will be located on the perimeter of the property just off town roads. These roads receive considerable travel and have narrow shoulders which necessitates the need for off-road parking.

Maintenance of the fishery area will be done as necessary. This will include rebrushing stream banks as nuisance brush regrows, maintaining existing habitat devices, posting boundary lines and parking areas, maintaining parking lots, and policing litter. The average annual maintenance cost is estimated at \$4,000. Additional assistance will be provided by Mecan Youth Camp crews and volunteer sportsmen groups.

Wildlife habitat development will include cover for ground nesting species. Marginal cropland will be reseeded to native grass species using sharecrop agreements when possible. Controlled burns and mowing will be used to control brush invasion.

Agricultural lands within the fishery area boundary will be sharecropped to provide food and cover for a variety of animal species and to keep edge and field openings within the forested areas. Wintering wildlife species, particularly songbirds, squirrels, quail, and deer benefit greatly by food plots of corn, oats, alfalfa, brome grass, and timothy.

Shrub plantings will provide food and cover for many nongame species including birds and small mammals. Shrub areas are excellent transition edge areas between woodlands and fields. Thornapple, highbush cranberry, dogwood, wild plum, and white cedar are appropriate species to be planted.

Wood ducks depend on trees with cavities for nesting. The woodlands should be managed to provide mature trees near the wetlands areas. Where needed, nesting boxes will be installed to increase available nesting sites.

The Mecan River Youth Camp presently is surrounded by an 80 acre closed area. This policy will be taken under consideration with the appropriate bureaus to determine if the closed area acreage can be reduced. The youth camp provides outdoor recreation and education and a labor force for DNR summer work projects. However, this master plan does not cover the scope, function or activities of the youth camp.

Forestry on the Mecan River System will be carried out according to management guidelines. Plantation management, type conversion and/or maintenance will produce periodic, yet sustained yields while providing wildlife food and cover, and watershed protection. Aesthetics, especially along high use areas, will be a major consideration.

Aesthetics along the river zone will be maintained by management of the bottomland hardwood type, favoring those trees high in scenic value - maple, birch, white pine and tamarack. Shrub species such as willow, tag alder and dogwood will be maintained for height, color and cover diversity as well as nesting and feeding areas for woodcock, grouse and songbirds. Streambank brushing along heavily vegetated lowland areas will be evaluated and conducted to have the least possible impact on grouse and woodcock habitat and yet accomplish good trout stream management.

Management of the oak type will consist of periodic cuts of small acreages (2-5 acres) on a rotational basis. This may be accomplished on a timber, pulp, or firewood sale basis and should be of a commercial nature. Reproduction should be present before final cuts are made. Areas lacking sufficient reproduction shall be treated by seed tree or shelterwood methods or planted to establish seedlings before final harvest. Scattered den trees shall be left for raccoon, wood duck, squirrel and cavity nesting birds.

Management of the red and white pine type is to follow prescribed management guidelines to the end of a sawtimber rotation. Products resulting from thinning will be pulp, cabin logs, and sawlogs. Natural invasion of brush beneath the pine canopy should provide some food value and escape cover for wildlife.

Management of the jack pine plantations will be on a pulpwood rotation. If adequate jack pine reproduction is established within three years after clear cutting, the area will be managed for jack pine. If reproduction is insufficient, the areas should be replanted to a 90% red, 10% white pine mixture at an approximate 8' x 6' spacing.

The jack pine - oak mixture should be managed to reproduce that mixture. In areas of sufficient reproduction, mature jack pine and oak should be removed to release stems below. Some stands need only a harvest of jack pine, allowing the oak to remain for mast and den tree production. Maintenance of this type should provide food and cover for deer, squirrel, fox, grouse and songbirds.

Management of the tamarack type will consist of small clear cuts to reproduce that cover type. Tamarack stands are generally small in size (2-5 acres) and will have to be managed in conjunction with other timber types.

Upland grass areas should be examined and evaluated on an individual basis. Emphasis should be on maintaining native cover. Those areas that lend themselves to food or shrub plantings should be so managed. Some areas should remain undisturbed, while others should be planted to trees, shrubs, or prairie species. All areas will be managed to best suit the needs of the wildlife species.

Forestry work of a non-commercial nature, such as pruning and release, will be accomplished with youth camp labor. Firewood permits may be used as a management tool to achieve goals not practical through commercial sales.

Six public use natural areas covering 157 acres shown in Figures 3a and 3b will be managed to preserve and perpetuate these unique resources. Although intended for public view and use, protective measures will be initiated as

necessary. Walk-in trails will be limited to marked areas. Specific management, as later determined through site by site evaluations, will be implemented only after consultation with the State Scientific Areas Preservation Council.

Limited hiking and cross-country ski trails will be maintained or developed as demand arises. The potential for multiple purpose trails is high since the Mecan River System has a wide variety of habitat types and terrain to provide the user with an exceptional aesthetic outdoor experience. All such trails, however, must be compatible with the overall intent and purpose of the fishery area.

All areas proposed for development will be examined for the presence of endangered and threatened wild animals and wild plants. If listed species are found, development will be suspended until the District Endangered and Nongame Species Coordinator is consulted, the site evaluated, and appropriate protective measures taken.

A complete biological inventory of the property will be conducted as funds permit. Additional property objectives may be developed following completion of such an inventory.

SECTION II - SUPPORT DATA

BACKGROUND INFORMATION

The Mecan River System Fishery Area contains some of the finest trout streams in central Wisconsin. The waters are generally crystal-clear and support excellent natural trout reproduction through 31.1 miles of the total 48.7 miles of stream length. Chaffee and Wedde Creeks and the Mecan River are three of only a few streams in the entire state that have naturally reproducing rainbow trout populations.

The fishery area offers outdoor recreational opportunities throughout the 4 seasons of the year. It contains a unique mixture of woods, water, and fields that gives a pleasant satisfaction to all who visit this natural and beautiful area.

All of the properties within the Mecan River System Fishery Area are located in southwest Waushara County and northwest Marquette County (Figures 1a and 1b). The headwaters of all 4 streams originate in Waushara County and flow south or southeast. Wedde Creek is a tributary to Chaffee Creek, while Chaffee and Little Pine Creeks are direct tributaries to the Mecan River. The Mecan River System is a major tributary of the Fox River watershed in the Lake Michigan drainage.

In 1957, boundaries for the Mecan River Fishery Area were approved by the Wisconsin Conservation Commission with an acreage goal of 2,494.58 acres. In 1974, it was reduced to the present goal of 1,307.5 acres. Initial funding was provided under the Dingell-Johnson Act but since 1967, land acquisition has been obtained from ORAP 200 funds. Presently, 1,028.24 acres are owned in fee title and none in easements (Table 1) on this segment of the system.

The Chaffee Creek Fishery Area was approved by the Wisconsin Conservation Commission in 1958 with an original acreage goal of 3,259.95 acres. The acreage goal was cut to 2,521.2 acres in 1970 and further reduced to 2,421.2 acres in 1974. Currently, there are 2,204.49 acres owned in fee title and none in easements (Table 1).

The Wedde Creek Fishery Area was originally approved in 1958 with an acreage goal of 2,324.52 acres. The acreage goal was cut to 828 acres in 1970, but was then reset at 840 acres in 1974. To date, 489.6 acres have been acquired in fee title and 23.0 acres in easements (Table 1), for a total of 512.6 acres.

Acquisition of the Mekan Wildlife Area was started in 1944. Initial funding was provided by state revenue from the Sportsmen's License Fund; later funding came from federal monies of the Pittman-Robertson Act. Originally, the Mekan River Wildlife Area included lands called the Lower Mekan Remnant Area, but when funds and acreage goal priorities within the wildlife program were directed more toward wetland and waterfowl projects, the wildlife program for upland habitat at Mekan River was considered complete in 1969 at 739.9 acres, all in fee title. No lands were ever acquired on the Lower Mekan Remnant. Thus, the boundary is proposed to be expanded to include those lands in the system which are shown as Parcels F, G and H on Figure 3b.

In 1961, the Wisconsin Conservation Commission approved the Waushara County Fish Remnant Habitat Program. Under this program, 379.75 acres were acquired in fee title on Little Pine Creek (Table 1). The task force recommended that they be considered as part of the Mekan River System Fishery Area.

TABLE 1. Present and proposed acreage goals with acreage acquired in fee title and easement, and acreage remaining to be acquired within the Mekan River System

Area	Present Acreage Goal	Proposed Acreage Goal	Fee Title Lands Owned	Easement Lands Owned	Total Acreage Acquired	Acreage To Be Acquired
Chaffee FA	2,421.2	2,421.2	2,204.49	0.0	2,204.49	216.71
Mekan FA	1,307.5	1,307.5	1,028.24	0.0	1,028.24	279.26
Mekan WLA	739.9	739.9	739.90	0.0	739.90	0.0
Wedde FA	840.0	840.0	489.60	23.0	512.60	327.40
L. Pine FA	-	636.1	379.75	0.0	379.75	256.35
TOTAL	5,308.6	5944.7	4,841.98	23.0	4,864.98	1,079.72

Management activities to date on the system have included trout stocking where needed, habitat development, maintenance of stream improvement devices, stream bank brushing, access development and maintenance, share cropping, wildlife shrub plantings, and pine plantings.

Natural reproduction of trout on Chaffee and Wedde Creeks and the Mekan River ranges from excellent in upstream areas to none in downstream sections. Areas with little or no natural reproduction are stocked annually.

In 1984, there will be plantings of 1,500 yearling and 6,300 fingerling brown trout in the Mekan River, 3,500 fingerling brown trout in Chaffee Creek, and 1,000 fingerling brown trout in Wedde Creek. The fingerling brown trout are planted in the fall to reduce the cost of stocking and provide a fish which is more wild in behavior. It is expected that these practices will result in a higher aesthetic fishing experience and better quality wild fishery. Little Pine Creek has a self-supporting native brook trout population.

The Mekan River system presently receives moderate to high fishing pressure throughout the fishing season. Chaffee and Wedde Creeks and the Mekan River have widespread reputations as high quality trout streams. Creel census surveys have shown that fishing pressure per mile of stream amounts to 375 man-days on Chaffee Creek, 100 man-days on Little Pine Creek, ranges from 300-500 man-days on the Mekan River, and 350 man-days on Wedde Creek. This calculates to 15,870 man-days of fishing pressure for the entire stream system. Creel rates are estimated at 0.5-0.6 trout per hour.

Stream improvement work was started in the early 1960's. Instream habitat improvement has been completed along 9,500 feet of the Mekan, 4,700 feet of the Chaffee, and 4,200 feet of the Wedde. Maintenance is conducted on these stream sections as needed to keep the devices functioning properly. Stream bank brushing was accomplished on 6,800 feet of stream bank to maintain marsh-meadow type stream edges. Existing instream habitat improvement and brushing are shown on Figures 4a and 4b.

There are 36 parking lots located along the Mekan River system. Most of these are small areas designed to accommodate 10 cars or less. Maintenance of these areas is limited to occasional litter policing, sign posting, and dead tree removal.

Management of uplands has been conducted to provide a diversity of habitat types and provide wildlife food patches. Sharecropping is practiced on 309 acres of state-owned land. The cooperating farmer is allowed to harvest 80% of the crop (corn, hay) with the remaining 20% left standing to benefit a variety of game and non-game species.

On state lands, 120 acres of pine plantations and 400,000 stems of wildlife shrubs have been planted.

Firewood permits were issued in the past on a first-come basis, but requests have increased to the point that demand now exceeds supply. Future firewood permits will be used to maintain and develop wildlife habitat.

Lands are heavily hunted during the deer-gun season. Hunting pressure on public lands can be 2-1/2 times the pressure on surrounding private lands. On opening weekend, hunting pressure has been documented at over 50 hunters per square mile on the fishery area. Small game and bow hunting are also popular on the area.

Other recreational and educational activities include picnicing, canoeing, hiking, and cross-country skiing. Occasional field trips are conducted for local high school and biology classes. There is also one snowmobile trail of 1.5 miles that crosses through fishery area. It is posted and maintained by the county snowmobile associations.

A wildlife refuge and closed area encompassing 325 acres is established in the headwaters area of the Mecan River to protect a population of giant Canada geese. Mecan Springs provides open water late in the winter while Greenwood Wildlife Area, located 2 miles north, provides a feeding and resting area. Documented goose use of the Mecan Springs dates back to the 1920's and goose use in the mid 1950's peaked at 6,000-8,000 birds. Presently, goose numbers peak at approximately 1,000. The population of geese has not really declined. Instead they are distributed over a wider area because of the development of additional wetlands in Waushara, Marquette and Green Lake Counties. Water quality has not declined because of the geese utilizing this area and is not expected to deteriorate in future years.

RESOURCE CAPABILITIES AND INVENTORY

Soils, Geology, and Hydrology

Area soils are derived primarily from the weathering of glacial drift deposits which are products of glacial action on the underlying Upper Cambrian sandstone. Glacial action also brought material from crystalline rocks further north so that the sandy soils here are somewhat more productive than the sandy soils found in the unglaciated central sand plains just west of Marquette and Waushara Counties.

Soil types in the area fall into 8 soil associations which include the Gotham-Mecan, Plainfield-Gotham, Delton-Briggsville-Mundelein, Granby-Tedrow-Moundville, Newton-Plainfield-Morrocco, Plainfield-Gotham-Wyocena, Nekoosa-Morocco-Granby-Plainfield, and Houghton-Adrian.

The soil associations Plainfield-Gotham, Plainfield-Gotham-Wyocena, Newton-Plainfield-Morrocco, Gotham-Mecan, Granby-Tedrow-Moundville, and Nekoosa-Morocco-Granby-Plainfield, comprise 85% of the land area. They are generally noted as sand, sandy loam, or loamy sand of nearly level and undulating soils of broad outwash plains. These sandy soils are poor agricultural producers unless heavily irrigated and fertilized.

The Delton-Briggsville-Mundelein associations are deep, well drained to poorly drained, slowly permeable soils that have a silty clay or silty clay loam subsoil over lake-laid silt, clay or sand. Much of the native vegetation of mixed hardwoods, mostly oak, has been cleared and is suited to cultivation. Some of these cleared areas are moderately eroded by water.

The remaining soil association, Houghton-Adrian, is generally composed of muck or peat soil of nearly level plains. It has a slower permeability rate and is a poor agricultural producer unless drained. If ditched and drained, this soil type has a high use value as agricultural muck land. Presently, wildlife utilizes these lowlands as critical cover and protection habitat between the stream and the upland hardwood areas. The marshy fringe areas along the stream also provide a buffer zone against runoff and stream enrichment.

The predominant sandy soils allow excess precipitation and melting snow water to percolate readily into the ground water which provides for an almost continual recharge of the ground water system. Numerous springs and artesian wells exist and account for stable stream flows within the Mecan River stream system. Also, due to the rapid infiltration rate, little flooding occurs.

Fish and Wildlife

Chaffee Creek - The fish species composition of Chaffee Creek is characteristic of a cold-water fishery. A survey conducted in the fall of 1980 shows that legal brown trout are abundant throughout the entire length of the stream and average 546 legal brown trout per acre. Rainbow trout are sparsely populated and are generally in the upper one-half of the stream length and average 33 legal fish per acre. Natural reproduction for both brown and rainbow trout ranges from excellent in many upstream areas to poor or none in downstream locations. Other fish species present and listed in order of abundance include mottled sculpin, johnny darter, brook lamprey, common shiner, creek chub, white sucker, redbelly dace, blacknose dace, mudminnow, fantail darter, brook stickleback, logperch, rainbow darter, and northern pike.

Little Pine Creek - Brook trout are the dominant fish species found in Little Pine Creek and number an average of 225 legal fish per acre. Brown trout are also present but number average only 15 legal fish per acre. Natural reproduction completely sustains the trout fishery in Little Pine Creek. Other fish species present and listed in order of abundance include mottled sculpin, longnose dace, blacknose dace, johnny darter, brook lamprey, common shiner, mudminnow, and bluegill.

Mecan River Management of the Mecan River is directed primarily at brown trout, but brook and rainbow trout are present in the Class I stream section located in Waushara County (Figure 3). Brown trout average 300 legal trout per acre, brook trout average 20 legal trout per acre, and rainbow trout average 5 legal trout per acre. Natural reproduction for all three trout species ranges from excellent in upstream areas to nonexistent downstream. Other fish present in the Mecan River and listed in order of abundance include common shiner, johnny darter, fantail darter, pearl dace, mottled sculpin, blacknose dace, white sucker, brook lamprey, hog sucker, creek chub, blackchin shiner, mudminnow, banded darter, blackside darter, northern pike, carp, bluegill, yellow perch, and rock bass.

Schmudlack Creek. It is a Class II brook trout stream, and a small tributary to the Mecan River. Less than 0.25 mile of Schmudlack Creek is located within the fishery area boundaries.

Wedde Creek - Brown trout are the dominant fish species found in Wedde Creek; however, brook and rainbow trout are also present in the Class I waters in Waushara County. Many upstream gravelled areas provide excellent natural reproduction for all three trout species while downstream areas have little or no natural reproduction. Brown trout average about 350 legal fish per acre, brook trout average 80 legal fish per acre, and rainbow trout average 20 legal fish per acre. Other fish species present and listed in order of abundance include mottled sculpin, white sucker, hog sucker, pearl dace, brook lamprey, johnny darter, fantail darter, blacknose dace, northern pike, and bluegill.

Particular notice should be given to the fact that the Chaffee, Wedde, and the Mekan are three of the very few streams in Wisconsin that contain naturally reproducing rainbow trout. While their numbers are relatively low, they have, nevertheless, naturally reproduced for many years.

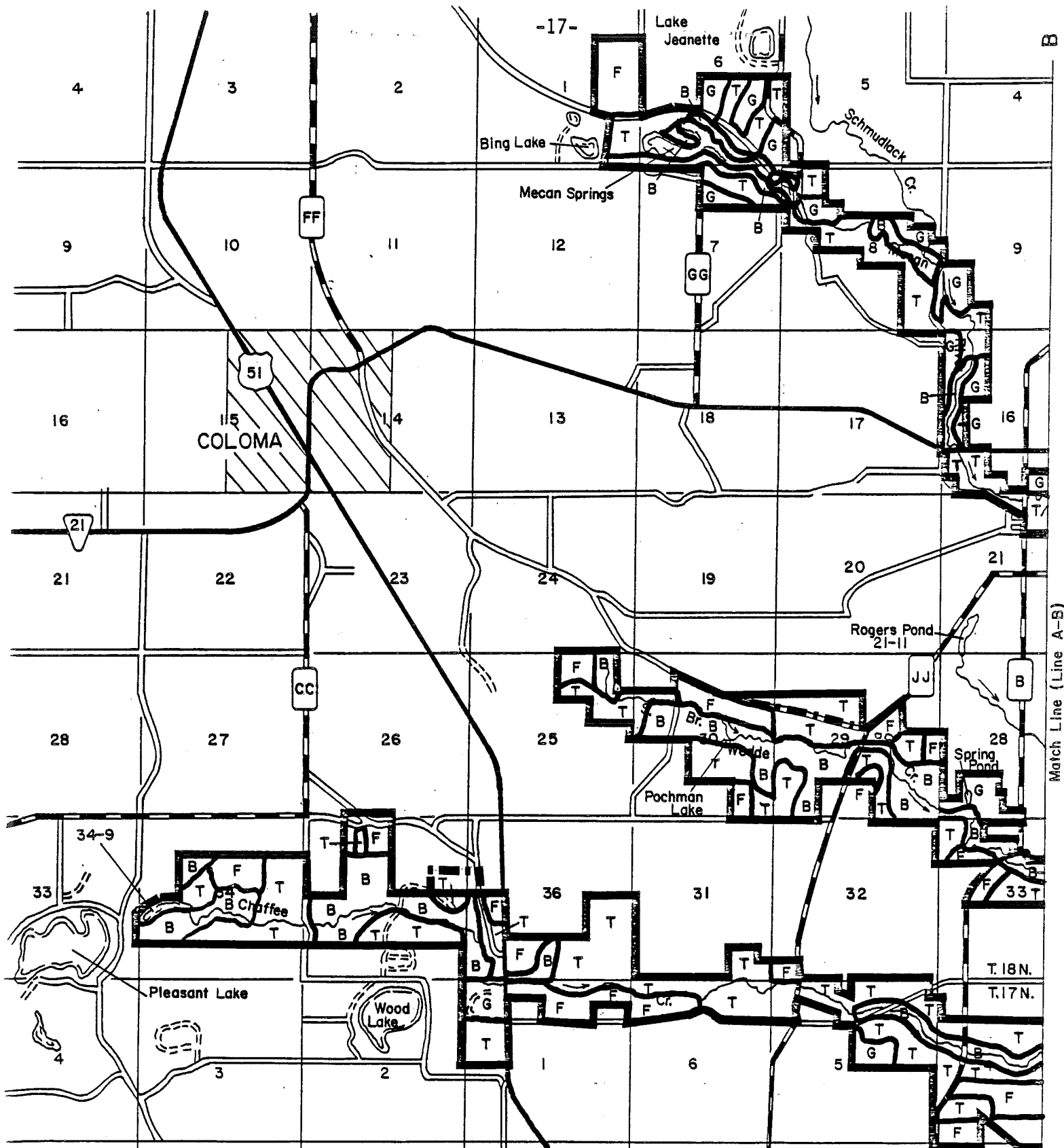
Wildlife - A detailed listing of wildlife species is not available for the Mekan River system; however, a variety of non-game wildlife, typical of the central Wisconsin sand plains, inhabit the fishery area. Two unique species of particular interest are the sandhill crane and the bobwhite quail, which are present here, but not common in many areas of the State.

Wildlife habitat within the Mekan River System Fishery Area is of high quality and contains squirrels and white-tailed deer. Other species include ruffed grouse, woodcock, raccoons, cottontails, red fox, muskrats, beaver, otter, mink, mallard ducks, and wood ducks. The nearby Mekan Springs Refuge is used as an open water resting area for Canada geese.

Waterfowl production from the Mekan River system is low to moderate, while pheasant populations are low because the property is located in very poor pheasant range.

VEGETATIVE COVER

Due to the high diversity of land and soil types in the Mekan River system, there is a correspondingly high variety of vegetative cover types ranging from lowland brush, grasses, and tamarack swamps to upland woods and fields (Figures 5a and 5b). The basic cover types and acreages are presented in Table 2. A forest reconnaissance study has not as yet been completed on the entire system. Thus, Table 2 shows only basic cover types, comparable to figures 5a and 5b.



MECAN RIVER SYSTEM FISHERY AREA

(Map 1 of 2 Maps) Scale 0 2112 4224 Feet

Figure 5a. General Cover Map.

LEGEND

- | | |
|------------------------------------|-----------------------|
| Property Boundary - - - - - | Brush - - - - - B |
| Proposed Boundary Change - - - - - | Grassland - - - - - G |
| Timber - - - - - T | Farmland - - - - - F |

Match Line (Line A-B)

(T.17-18N-R8-9-10E.
Montell, Oxford,
Richford & Wautoma
Quad. Maps)

R.8E.
R.9E.

18 17 16 A

Figure 5b. General Cover Map.

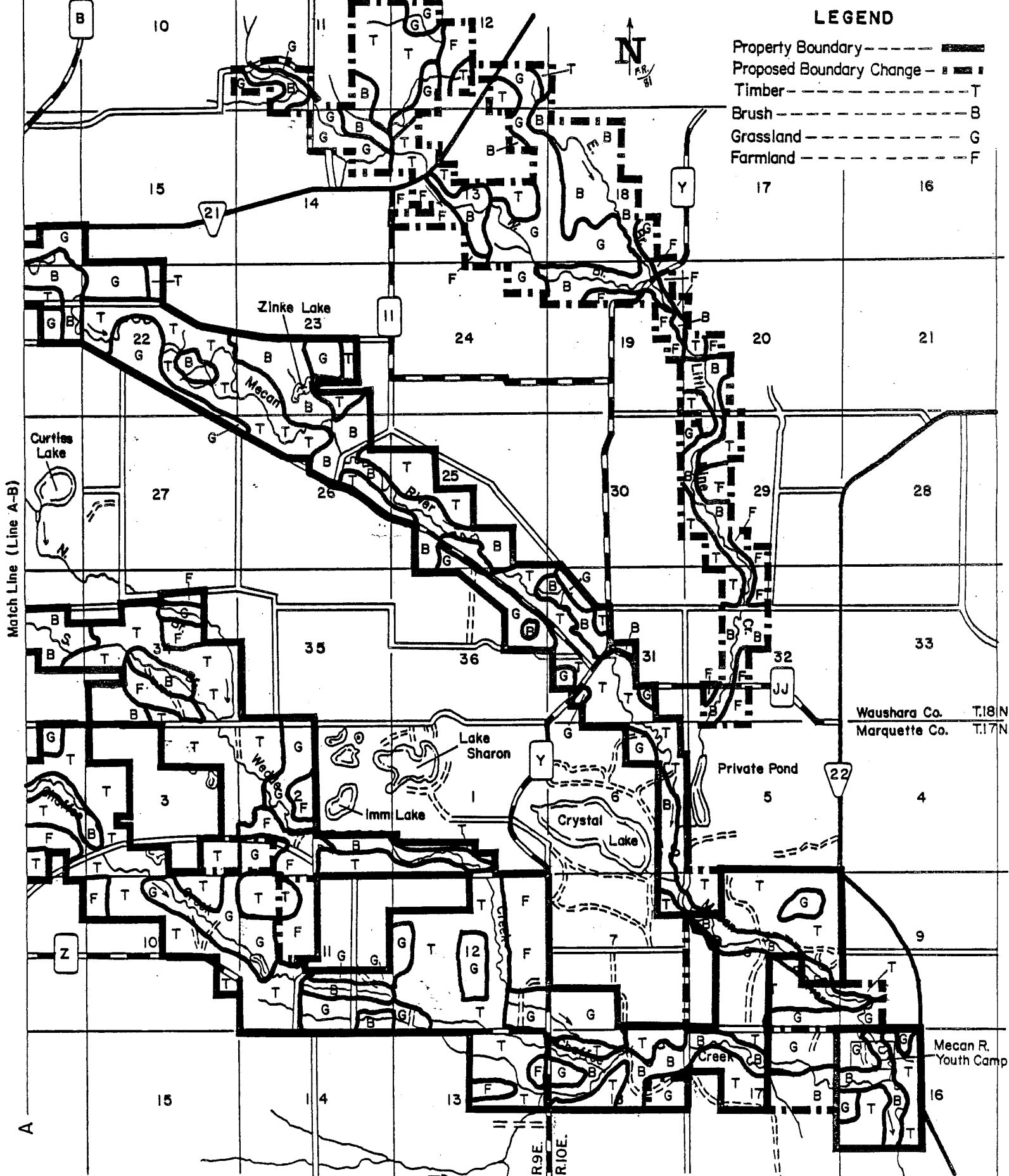


TABLE 2* Acreages of vegetative cover types on all lands within the boundary, Mecan River System Fishery Area.

Acres Of:	Chaffee Creek	Wedde Creek	Mecan River FA	Mecan River WA	Little Pine RA	Total
Lowland Brush	888.1	615.5	490.9	160.8	426.2	2,581.5
Woods	1,057.5	431.3	1,205.6	350.2	609.8	3,654.4
Upland Grasses	260.6	188.9	164.1	88.1	119.8	820.7
Pine	78.3	222.0	95.1	110.7	14.8	520.9
Fields	901.4	733.1	784.6	0	331	2,750.7
Lowland Grasses	74.1	89.7	55.3	30.1	178.6	427.8
Total Land area (acres)	3,260.0	2,280.5	2,795.6	739.9	1,680.0	10,756.0

*Includes proposed changes in property boundaries.

Most of the timber is composed of scrub oak, lowland hardwoods, and tamarack and is not of suitable quality to justify a large-scale forestry operation. Much of the timber that does exist occurs in scattered areas with poor accessibility. Management of the wooded areas would be primarily oriented to wildlife production, streamside protection, and natural setting aesthetics. Mast production and an adequate number of mature trees to provide habitat for cavity nesting birds and mammals are important considerations.

Much of the lower quality farm land has been abandoned and is reverting to natural vegetation or has been planted to pine plantations (520.9 acres). Current forestry practices on these pine tree areas will produce a low volume of good quality timber in the future.

Endangered and Threatened Species

In 1982, a pair of Cooper's Hawks, listed as a threatened species, was documented to have nested in Section 30, Richford Township, Waushara County. No other endangered or threatened species of fish, amphibians, molluscs, mammals, reptiles or wild plants have been documented on the area. Several migratory species, such as bald eagles and red-shouldered hawks have been sighted over it; however, they do not nest on the area.

Water Resources

The Mecan River is a hardwater, spring-fed stream that originates from a large flooded spring area known as Mecan Springs. It flows southeasterly through Marquette County and at the Green Lake County line joins the upper Fox River. The stream drains a total of 201 square miles of watershed and has an average gradient of 1.8 feet per mile.

Class I trout water extends from the headwaters downstream for 6.6 miles to the 11th Road bridge with Class II trout water continuing downstream to Highway 22, (Figure 2). Although an occasional large trout is taken below

Highway 22, this lower stretch of river more commonly supports a warmwater fishery. After it leaves the system fishery area, the Mecan River flows through an area flooded for waterfowl, the Germania Wildlife Area, before it enters the Fox River.

The four main tributaries of the Mecan River include Chaffee Creek, Wedde Creek, Little Pine Creek, and Schmudlack Creek. Table 3a supplies the trout stream lengths and total lengths for these creeks. Table 3b lists all lakes and ponds within the Mecan River System Fishery Area.

The waters of the Mecan River system are usually clear, alkaline (pH values of 8.0 - 8.5) and hard (total alkalinity of 150-197 ppm CaCO_3). Specific conductance ranges from 285-364 umhos/cm. Generally, the upper stream portions are characterized by small pools and longer run-riffle areas with adequate gravel for spawning and reproduction. Downstream portions of these streams have predominant peat banks with sandy bottom and a higher pool/riffle ratio. Stream gradients range from 1.8 - 6.8 feet/mile. Table 4 lists the various physical and chemical data for the streams of the Mecan River system.

TABLE 3a. Lengths (in miles) of streams within the Mecan River System Fishery Area, Marquette and Waushara Counties.

Name	County	Trout Water-Miles		Surface Acres	Total Trout* Stream Length
		Class I	Class II		
Chaffee Creek	Marquette	6.3	4.2	16.5	12.3
Chaffee Creek	Waushara	1.8	-	2.9	-
Mecan River	Marquette	-	6.4	23.3	16.2
Mecan River	Waushara	6.6	3.2	30.9	-
Little Pine Creek	Marquette	1.0	-	4.3	8.9
Little Pine Cr., W. Br.	Waushara	6.4	-	2.7	-
Little Pine Cr., E. Br.	Waushara	1.5	-	0.6	-
Schmudlack Creek	Waushara	-	0.2	0.1	0.2
Wedde Creek	Marquette	-	3.6	5.7	11.1
Wedde Creek, N. Br.	Waushara	2.6	-	2.7	-
Wedde Creek, S. Br.	Waushara	4.9	-	8.2	-
Totals		31.1	17.6	97.9	48.7

*Gives total for main branch and tributaries within the fishery area.

TABLE 3b. Lakes and Ponds within the Mecan River System Fishery Area, Marquette and Waushara Counties.

Name	County	Surface Acres	Maximum Depth	MPA	pH
Mecan Springs	Waushara	40.5	21	194	8.2
Pochman Lake	Waushara	1.5	7	104	8.4
Zinke Lake	Waushara	3.9	17	188	7.8
Unnamed Pond T18N, R9E, S28	Waushara	1.8	2	190	8.0
Unnamed Pond T18N, R8E, S34	Waushara	3.2	3	101	7.3
TOTAL		50.9			

TABLE 4. Physical and chemical data for streams in the Mecan River System Fishery Area, Marquette and Waushara Counties.

Stream	Average Width (ft.)	Normal Flow (cfs)	Gradient (ft/mi)	Drainage (sq. Mi)	Total Alkalinity (ppm)	Conductance (umho)	pH
Chaffee Cr.	13	11	6.8	13	154	300	8.1
Little Pine Cr.	4	4	2.6	9	184	308	8.2
Mecan R.	30	30	1.8	201	162	350	8.0
Schmudlack Cr.	4	2	2.3	2	197	364	8.5
Wedde Cr.	13		4.8	11	150	285	8.2

Although some shoreline erosion and sluffing exists, streambanks provide cover and protection for the trout. Instream cover occurs in the form of logs, rocks, brush tangles, and water depth. Adequate cover, particularly for larger trout, is noticeably absent from some of the Class I areas. Instream vegetation is sparse throughout the Mecan River system. Some areas of dense overhanging alder grows along the stream banks.

Historical and Archeological Features

No architectural, archeological, or historical surveys have been made of the area. Thus, prior to any movement of soils or structures to accomplish proposed objectives on the fishery area, the State Historical Society will be contacted for advice.

Land Use Potential

The lands within the Mekan River System fishery area are grouped into 3 broad categories: Resource Protection, Resource Development, and Administrative. The Land Use Classification maps (Figures 3a and 3b) illustrate the land classifications:

Resource Protection - The Scientific Areas Preservation Council recognizes 6 locations of noteworthy significance within the boundary. These sites, shown in Figure 3, include 6 Public Use Natural Areas (N) as follows:

1. Upper Chaffee Meadow (N₁ - 20 acres) - A high quality wet to mesic prairie and fen complex with a high diversity of plant species found in T17N, R8E, S. 1, N1/2, NE1/4, NW1/4.
2. Lower Chaffee Meadow (N₂ - 5 acres) - A small fen with many native fen, prairie, and marsh plants present. This area is found in T17N, R9E, S. 13, N1/2 NE1/4 NE1/4.
3. Mekan Springs (N₃ - 17 acres) - A large clearwater springs wetlands area in the bottom of a moraine depression found in T18N, R8E, S. 1, N1/2 SE1/4 SE1/4.
4. Zinke Lake (N₄ - 20 acres) - A hardwater, spring-fed marl lake with a shoreline dominated by tamarack, found in T18N, R9E, S. 23, SE1/4 SW1/4.
5. Crystal Lake Club Woods (N₅ - 45 acres) - A wooded area that contains large specimens of black, white and red oak and white, red, and jack pine along with stands of tamarack, alder, white birch, and red maples. This area is located in T17N, R10E, S. 6, SE1/4 NE1/4 and NE1/4 SE1/4.
6. Liberty Bluff (N₆ - 50 acres) - An outcrop of precambrian sandstone with ripple marks and an old second growth of white and red pine forest found in T17N, R8E, S. 1, W1/2 NW1/4.

These, and any additional sites discovered on the property will be managed and/or developed only after consultation with the Scientific Areas Preservation Council.

Resource Development (RD₂) - The majority of the land within the Mekan River System fishery area is classified as a Fisheries and Wildlife Management Area (RD-2). The intent of this classification is to perpetuate and/or develop wildlife and fisheries habitat as well as to provide habitat protection for any threatened or endangered plants or animals.

Administrative (AD₁)

An 80 acre tract of land within the fishery area is the site of the Mekan River Camp of the Youth Conservation Corps (YCC), which has been classified as Administrative (AD₁).

RESOURCE MANAGEMENT PROBLEMS

Fisheries Habitat

The amount of suitable habitat presently limits the trout population. Natural reproduction in downstream areas is severely reduced due to a lack of spawning gravel substrate and concentrated areas of spring flow. A lack of instream cover and stream bank cover limits the trout carrying capacity in many stream sections. Problems also exist with excessive brush growth along stream banks and with dead and dying trees falling into the stream. Stocking of trout is required to maintain a fishable population in Class II waters.

An electrical fish barrier has been installed to prevent upstream migrations by rough fish and northern pike into the trout stream portions of the Mekan River from the Germania Wildlife Area; however, storms and high water periods could cause this installation to malfunction. Maintenance and monitoring of the fish barrier is conducted as conditions dictate. Despite the presence of this electrical barrier, small numbers of detrimental and rough fish are found in the system.

Firewood Policy

With the increasing cost of fossil fuels, extreme pressures have been placed on property managers to issue firewood permits. The primary hardwood species is oak which should be protected from uncontrolled cutting to encourage the cavity-nesting species of wildlife. Firewood thefts, inadequate access, and insufficient marking and monitoring funds have all caused problems with the present limited firewood policy.

Public Over-use

Since the Mekan River system is within an easy half-day drive of many large population centers, heavy public use of the area exists. During the gun-deer hunting season and opening weekend of trout season, crowding reaches undesirable levels and causes unpleasant conditions.

Trespassing on neighboring private lands, particularly during the hunting seasons, is a problem. Signs delineating property boundaries are often vandalized or not heeded.

Heavy fishing pressure has reduced the quality of the fishery. Stocking of the Class II waters is necessary to sustain a moderately high trout population. Habitat improvements have been made in the past and will be carried on in the future to increase numbers of naturally reproduced trout.

User conflicts occur on the Mekan River between canoeists and fishermen. They may increase as canoeing continues to gain popularity.

Unlawful trespass with motor vehicles, illegal camping, and littering have been annoying problems. Acts of vandalism, such as tearing down gates, property signs, and fences, are more costly problems.

Recent funding has been approved for surveying, posting, placing signs, and policing of state-owned lands. Additional funding has been requested for new parking lots, more land surveys, and further maintenance. This should help alleviate such problems as parking congestion along roadways, littering, unclear property boundaries, and inadequate maintenance.

One snowmobile trail runs for approximately 1.5 miles through the property (Figure 4). County snowmobile associations are responsible for posting and assume all liabilities. The locations of the trails do not presently conflict with the resource management of the property; however, if misuse of the trails and problems occur, future snowmobile use of these areas would be discontinued.

Private Development and Inholdings

The nature of much of the land next to the streams makes them vulnerable to drainage. Drainage of lowland brush, tamarack, or marsh areas would reduce the water quality, and potential carrying capacity for trout, as well as food and hiding cover for non-game species. Buildings adjacent to stream frontage reduce aesthetic quality, increase user conflicts, and land acquisition costs.

Private inholdings within the property boundaries will limit management, habitat development, and public use until land acquisition is completed. Many of these land parcels may not be available for purchase for a number of years.

RECREATION NEEDS AND JUSTIFICATIONS

Because trout streams are a relatively scarce resource in southern Wisconsin, the protection, preservation and public access to them is of high priority. The opportunity to provide outdoor recreation in a natural environment close to large population centers is generally limited. The Mekan River System Fishery Area presently provides such recreation, and with proper planning and management, will be protected and continue to provide quality recreation.

According to the 1981-82 Wisconsin Blue Book, the 1980 population of Marquette County was estimated at 11,672 while Waushara County's population was 18,526. The total population for Marquette and Waushara Counties and the 6 adjoining counties is 337,230. Stevens Point, Oshkosh, Portage, Wisconsin Rapids, and Madison are nearby major population centers. In addition, the smaller towns or villages of Coloma, Harrisville, Montello, Neshkoro, Wautoma, and Westfield are all located within 10 miles of the fishery area.

Excellent highway access makes the fishery area accessible to 1.5 million people within one hour of driving time and to 4 million people within 3 hours of driving time. With the ever increasing price of gasoline and transportation, it is expected that fishermen may not travel extreme distances to pursue their fishing interests. This would undoubtedly increase the fishing pressure on southern Wisconsin areas such as the Mekan River system. Thus, management and development of the existing fishery area must remain a high priority if the resource is to be maintained and/or improved.

The value of the fishery area lands for hunting and other day-use activities presently appears to exceed the fishery value of the stream. It provides excellent habitat for white-tailed deer and squirrels. Hunting pressures for these and other species are already high. The diversity of land types accounts for a wide variety of plants and animals that create a high potential for nature study, cross-country skiing, hiking, and mushroom and berry picking. However, the value of having available a trout stream complex of the size and quality of the Mekan River System for public use now and in the future should not be underestimated.

Recreational demand has risen dramatically over the last 10 years, and it is expected to increase significantly in the next 10 years. Private lands will be less available to the general public. As energy sources continue to rise in price, public recreational lands in southern Wisconsin will become increasingly important.

ANALYSIS OF ALTERNATIVES

The basic management program for the Mekan River system calls for limited development of the property. The overall objective is to protect and preserve the natural aesthetics of the fishery area while providing a high level of recreational opportunity. The analysis of alternatives is as follows:

1. Do Nothing

If all management practices were halted, fish habitat would deteriorate in future years. Tag alder would encroach and cause deterioration of the stream channel. Streambank erosion problems would go uncorrected. Silt would cover spawning beds and cause pools to become shallower. Trout carrying capacity and trout populations would eventually decline.

The wildlife habitat under this policy would remain relatively stable over a period of time before undergoing a gradual decline in quality and carrying capacity.

A policy of not acquiring additional public lands within the property boundaries would leave those private areas open to recreational subdivisions and the lowlands subject to drainage. This would have a negative impact on the water quality and the natural aesthetics of the area. Also, there would be no additional public access for recreational opportunities.

Attainment of the goals and objectives would be impossible if the area would be reduced. Policy of the Natural Resources Board discourages disposing of existing state properties with such fine aesthetic values and uses as the Mekan River system.

2. Enlarge the Fishery Area (Recommended Alternative)

It is desirable and recommended to enlarge the property boundaries as shown in Figures 3a. and 3b. The influx of persons from surrounding regions seeking outdoor recreation taxes the entire resource base. The integrity of the Mekan River system will be preserved and adequate public

access will result with these enlarged boundaries. The recommendations for boundaries also include adding 636.1 acres (of which 379.75 are already state-owned) to the total acreage goal for the entire Mekan River System Fishery Area.

3. Limited Habitat Management

Limited habitat management is necessary to maintain the present resource and prevent decline, particularly of the trout population. Instream structures would need periodic maintenance; brush tag alder areas would need rebrushing. Parking lots and access areas would require repair and periodic litter pick up. Present sharecropping practices would continue. Under this policy, the carrying capacity of fish and wildlife would not increase.

4. Intensive Habitat Management

In order to expand the fishing opportunities, extensive and intensive management of the area would be necessary. Funding for extensive rehabilitation is not available. Stream improvement projects have been completed on some portions of the Mekan River system and additional stream bank brushing, erosion control, and instream structures are planned projects for the future (Figures 4a and 4b) as funding and manpower are available. Maintenance of the existing structures and brushed areas will occur as needed.

Management of the area for wildlife will be aimed at maintaining habitat for white-tailed deer, squirrel, ruffed grouse, woodcock, cottontails, and wood ducks.

APPENDIX -- Comments by Outside Reviewing Agencies or Persons, to the Mekan River System Master Plan.

During, and after the 45 day reviewing period, a large number of written statements regarding the master plan were received. Those comments, and DNR responses, where necessary, are included in this Appendix which will be attached to the final copy of the master plan that is submitted to the Natural Resources Board for approval. The comments follow:

June 9, 1983

Mr. James T. Addis, Director
Bureau of Fish Management
Wisconsin Department of Natural Resources
Box 7921
Madison, WI 53707

Re: Master Plan Review - Mekan River System Fishing Area

Dear Mr. Addis:

In regard to your department's Master Plan Review - Mekan River System Fishing Area, Waushara and Marquette Counties, the Town Boards of Richford and Dakota in Waushara County are asking for an extended review period of 90 days to allow the Boards ample time to review and evaluate the potential affects of the Master Plan on the area residents and the resource.

In so much as the Boards feel the plan represents a potential for serious affects on area residents and the resources and in so much as the 45 day review period was somehow short circuited (seven [7] working days after the June 1, 1983 public hearing) and in so much as your department failed to supply each area resident with copies of the Master Plan or even each participant at the public hearing, we feel, in the interest of the resource and area residents, that this request for the 90 day extension is entirely justifiable and mandatory.

It is the intention of the Board to evaluate your proposals as outlined in the Master Plan by a committee appointed for that purpose. This committee will present your department with a written documented comment before the end of the review period. Area residents and absentee land owners will be encouraged to submit their comments to either the Board's committee or directly to your department.

We would also request that your department make available to the Town Boards of Richford and Dakota enough copies of the Master Plan so that each area resident and absentee land owner affected by this proposal can be informed as to the issues raised by the Master Plan.

Sincerely,

TOWNSHIP OF RICHFORD
Waushara County, Wisconsin

By Harlan Beutler, Chairman

TOWNSHIP OF DAKOTA
Waushara County, Wisconsin

By Marvin Wagner, Chairman

June 24, 1983

Mr. Harlan Beutler, Chairman
Township of Richford
Route 1, Box 92
Coloma, WI 54930

Mr. Marvin Wagner, Chairman
Township of Dakota
Route 1
Wautoma, WI 54982

Gentlemen:

I am responding to your June 9, 1983 letter requesting a 90-day extension of the public review period for the Mecan River System Master Plan so that the towns could further analyze the project and prepare appropriate comments.

We mailed the draft master plan to you and other local officials on April 28, 1983, for a review and comment period of 45 days ending June 13, 1983. Subsequently we held a public information meeting to explain the project and receive input from local residents on June 1, 1983.

The master plan encompasses several streams that were previously individual projects. These projects were established during the late fifties. Therefore the purpose of our planning process does not relate so much to establishing the fishery area as it does to presenting our plans for maintaining and developing them for public use.

We believe that the routine procedure that we followed provides a good cross-section of public opinion. Therefore we will not extend public comment period beyond June 13, 1983.

We will allow the towns an extended review and comment period through August 12, 1983. Both Michael Primising and James Congdon will be available to discuss any aspect of the project that your town boards feel are needed.

Due to cost we do not provide individual copies of draft master plans. About 50 copies were mailed to local officials and passed out at the public hearing. In addition, copies were also available for review in our local offices. Anyone wishing to have their own review copy can obtain it from the DNR Area offices at a nominal charge of 10 cents per page or \$2.50.

Sincerely,
Bureau of Fish Management

James T. Addis
Director
JTA:mg

August 11, 1983

James T. Addis
Bureau of Fish Management
Wisconsin Department of Natural Resources
Box 7921
Madison, WI 53707

Dear Mr. Addis:

Working together the towns of Richford and Dakota selected a committee to research and compile a response to the Master Plan Review - Mekan River System Fishery Area plan. Interest from the towns of Newton and Crystal Lake, Marquette County also helped generate input for our response. Our concerns are confirmed by the work shown in the following comment.

Restraints to our response have been time and resources; all interested parties donated of themselves and their resources generously. Our response reflects the concerns of citizens and local government; how we must live with the Mekan River Plan.

While we generally receive cooperation and assistance from local DNR employees; we find they are restricted in their response by higher authorities and guide lines. We are not however satisfied with the people utilizing the streams and hunting areas. We feel the DNR must make stronger efforts to control some of these problems. These areas are touched upon in our response.

The financial impact on local and county government and its economy is staggering. We think you will find our figures and analysis overwhelming.

We laud the efforts of this committee and urge them to continue by educating the people and working to resolve the problems presented.

To you, Mr. Addis, we present our response and hope that we may continue our working relationship with all parties involved. Should you have questions, etc. please don't hesitate to contact us. We feel it is the mandate of local government to work for the betterment of our community, and the quality of life for landowners and residents of our towns.

Respectfully yours,

TOWNSHIP OF RICHFORD

TOWNSHIP OF DAKOTA

By Harlan Beutler, Chairman

By Marvin Wagner, Chairman

August 19, 1983

File Ref: 3600

Mr. Harlan Beutler, Chairman
Township of Richford
Route 1, Box 92
Coloma, WI 54930

Mr. Marvin Wagner, Chairman
Township of Dakota
Route 1
Wautoma, WI 54982

Gentlemen:

I appreciate the timeliness of your comments regarding the Mekan River Fishery Area Master Plan.

My initial skimming of your comments indicate that you made a sincere effort to give thoughtful consideration to those aspects of the project you perceive to be adverse to the Town's interest. I appreciate you compressing your analysis into the shorter review period and will see that your concerns are carefully reviewed and discussed with you prior to proceeding with completing our planning effort.

The purpose of this letter is to acknowledge receipt and thank you for the timely submission of your comments.

We will provide you with a formal response as soon as we have completed our review and analysis.

Sincerely,
Bureau of Fish Management

James T. Addis
Director

August 10, 1983

Mr. Harlan Beutler, Chairman
Township of Richford

Mr. Marvin Wagner, Chairman
Township of Dakota

Re: Committee's comments on the Master Plan-Mecan River System Fishery Area

Dear Sirs:

Enclosed are the comments of the Committee for the Study and Research on the Master Plan-Mecan River System Fishery Area of the Department of Natural Resources Master Plan involving extended land control and purchase by the DNR in Richford, Dakota, Crystal Lake and Newton townships of Waushara and Marquette counties.

It is the unanimous opinion of the Committee, based on the documentation contained in our comments, that the Master Plan-Mecan River System Fishery Area represents a potential for serious effects on both the human and natural resources of the four townships affected. Aside from the absence of any real justification for the additional land acquisitions that are proposed and that the plan provides no evidence that the area is threatened by degradation if it is left in private ownership, the most notable threat is taxation without representation. It is clearly apparent that the citizens of this area will be adversely affected by this political philosophy.

For these reasons and others, the Committee strongly urges the town boards of Dakota and Richford to draft a letter of protest to be included as a preface to the Committee's comments.

It is the Committee's suggestion, that in order to effect some positive results in regard to the more notable deficiencies the Master Plan represents, that the town boards of Richford and Dakota empower the Committee to continue its work in opposition to the Master Plan. We would suggest that, at the earliest opportunity, a joint meeting of the town boards and Committee members be held to map out a strategy for the Committee's future work.

Sincerely,

Jack Frost, Chairman
Committee for the Study and Research on the Master Plan-Mecan River System
Fishery Area.

cc: Comments

COMMITTEE FOR THE STUDY AND RESEARCH ON THE MASTER PLAN COMMENTS
ENVIRONMENTAL IMPACT OF PLAN

Due to the Department's refusal to grant a full 90 day extension of the review period to the Committee for its review of the Master Plan-Mecan River System Fishery Area, Waushara and Marquette Counties, the following comments not only will be incomplete but not very comprehensive. As a result of the time requirement imposed, the Committee will have to restrict their comments to some of the conceptual aspects of the Plan.

DNR RESPONSE: In addition to the initial 45 day review period which has been authorized for all other master plans, 51 more days were granted for comment.

TOWNS: There are however, three (3) exceptions the Committee would like to address:

1. The political philosophy as outlined in the Plan, both expressed and implied, is cause for great concern and is indeed, frightening.

DNR RESPONSE: The task force is unable to determine what is meant by "political philosophy". None is intended nor implied.

TOWNS:

2. Despite the statements, "All past and future land aquisition has been and will continue to be, from willing sellers." (page 6) and despite a quote from fish manager at Montello that, "If you don't want to sell, you don't have to" adding the DNR does not condemn land nor force or pressure its owner to sell, documentation exists to the contrary in the condemnation of the Maurice Leahy farm in Green Lake County as only one example.

DNR RESPONSE: The power of eminent domain (condemnation) is a constitutional and statutory right of all units of government including townships. The Department of Natural Resources, however, is the only unit of government that is restricted by state statutes to securing legislative approval prior to initiating litigation. The head of the department is the only department employee who has the authority to even recommend condemnation action to the Natural Resources Board. If his recommendation is accepted by the Board it

must be approved by the appropriate starting committees of each house of the legislature and finally by the Governor. Only after both the executive and legislative branches of state government agree that the recommendation is in the best interest of the people of the state may the litigation proceed.

In the entire history of the Department of Natural Resources and its predecessor agencies, condemnation action has been used for fish management purposes only once. That action involved land at a state fish hatchery that was owned by a Department employee.

Since the Mekan River is a fishery project and involves only minor development, there would be no need for the Department Secretary to make a recommendation for condemnation. The Maurice Leahy condemnation action of 15 years ago (December 17, 1968) was not part of the fishery program. Part of the Leahy property was to be flooded and the Leahys' decided the entire property should be acquired rather than the portion needed.

TOWNS:

3. The statements of "protect and preserve" on page 24 and repeated again on page 1 as "preserve and enhance" prove to be interesting when viewed in the long term at the Mekan Springs. Since the state gained land control of this area, presumably to "preserve and enhance", the goose population has dropped from 6,000-8,000 to 1,000 thru the combined efforts of fish and game management, carp have migrated up the Mekan River from the Germania Marsh to infest and destroy much of what once was a bass fisherman's paradise and because of a unresolved water level dispute with the remaining land owners, water levels fluctuate, sometimes 8-10" monthly. An ironic side note indicated that the Germania Marsh was built as a refuge for migrating waterfowl, which at times, has large concentrations of waterfowl. However, according to the Fish and Wildlife Service in its October, 1978 Draft Migratory Bird Disease contingency Plan, "... dense concentrations of Waterfowl should be discouraged." Apparently, under the land control of the department, the resource has lost at both ends of the Mekan River System.

DNR RESPONSE: The Mekan Springs area presently supports a modest warmwater fishery of largemouth bass, northern pike, panfish and an occasional trout. Water levels do fluctuate, but only through the illegal actions of unknown individuals. Carp were known to migrate up the Mekan River long before the existence of the Germania Wildlife Area. Goose populations have fluctuated, but probably because they are attracted to larger waterfowl refuges such as Horicon and Grand River. The Germania Marsh W.L.A. is much larger than Mekan Springs, has a higher food productivity, and can therefore accommodate larger numbers of waterfowl. To date, there have been no recorded waterfowl disease problems on Germania Marsh.

TOWNS: One of the most notable deficiencies of the Plan outlined in the document is the absence of any real justification for additional land acquisitions that are proposed. Except for noting on page 23 that,

"The nature of much of the land and next to the streams makes them vulnerable to drainage. Drainage of the low land brush, tamarack or marsh areas would reduce the water quality and potential carrying capacity for trout. Building adjacent to stream frontage will reduce aesthetic quality, increase user conflicts, and land acquisition costs."

DNR RESPONSE: The task force will add a statement to the final master plan that in addition, state ownership will not only assume proper management of the lands and waters forever, but with the inevitable human demand from increased populations in the future, will prevent the breakdown of large private parcels of land into small recreational lots. State ownership will also be non-polluting and does not contribute to excessive fertility of the streams.

TOWNS: The Plan provides no evidence that the area is threatened by degradation if it is left in private ownership. It contains no data on the rate of drainage that is occurring, or the number of buildings constructed adjacent to stream frontage to date, and it provides no projection of these activities into the future to demonstrate that the area actually is threatened or that it can be better preserved in public ownership.

DNR RESPONSE: Partially answered above. The conceptual element of a master plan does not require information relating to current drainage or the number of buildings constructed on the system.

TOWNS: The Plan also fails to consider substantively any alternatives to fee acquisition by the state for preserving the area and meeting the recreation objectives of the Plan. For example, although the Plan states that "acquisition of perpetual easements will be considered" (page 2), when it comes to actually discussing alternatives, we find only the proposed plan (Enlarge Project), Do Nothing, Limited Habitat Management and Intensive Habitat Management. Nowhere do we find an objective discussion of how the objectives of preserving the area and providing greater recreational opportunities might be achieved while leaving the land in private ownership. For example, there is no discussion of how private landowners might be induced to preserve the area through conservation easements or tax incentives, nor is there any discussion of how the proposed management practices might be implemented through cooperative programs with the landowners. Indeed, if the recreational "demand" is as great as the Plan asserts, there might be substantial economic incentive for the landowners to preserve the area and manage it as a private recreational area.

DNR RESPONSE: It is gratifying to note that the committee endorses easement purchases in the fishery area. Although fee acquisition may be needed for multiple recreational uses of the property, easements are commonly used to provide fishing access and stream improvement. When landowners want to sell an easement, the Department always evaluates the offer. Whenever land is in private ownership, the majority of the general public does not have access to the water.

TOWNS: It is significant to note that, even without the implementation of this Plan,

"The Mekan River System Fishery Area contains some of the finest trout streams in central Wisconsin. The waters are generally crystal-clear and support excellent natural trout reproduction through 31.1 miles of the total 48.7 miles of stream length. Chaffee and Wedde Creeks and the Mekan River are three (3) of only a few streams in the entire state that have naturally reproducing rainbow trout populations.

The fishery area offers outdoor recreational opportunities throughout the four (4) seasons of the year. It contains a unique mixture of woods, water and fields that gives a pleasant satisfaction to all who visit this natural and beautiful area."

Clearly, the area has not undergone severe degradation as a result of the 1,069.72 acres proposed for acquisition being in private ownership, and without substantive evidence that the area faces serious threats unless these additional acreage is acquired by the state, there seems to be little justification for expending another \$1,054,000.00 of public tax revenues to take it out of private ownership. Indeed, if it will take 25 years to acquire these additional lands, it is obvious that, if they are now threatened, something else will have to be done in the meantime or the area will be severely degraded before the Plan can be implemented. Conservation easements and tax incentives to the existing landowners would appear to be a logical approach to preserving the value of the area now.

DNR RESPONSE: It is especially pleasing to note that the committee realizes the value of preserving the area now. Again, the Department always considers easement purchases when the landowner is willing to sell an easement. Other owners, however, express an intent in selling fee title only. One property tax benefit available to private landowners is for forestry purposes. Income tax benefits can be realized by donors of land rights. Over ten percent of all the land under the Department's jurisdiction has been acquired by gift, so it is very common for individuals to donate realty rights to the state.

TOWNS: According to the Plan, the problems which the area faces are a lack of spawning habitat, a lack of instream cover, and brush growing along the banks and trees falling into the water, increased pressure for firewood permits and public overuse of the area (page 22-23). However, the Plan notes that,

"Excellent natural (trout) reproduction occurs throughout the upper regions of each of the streams." (page 6)

and the only management practices proposed are,

". . . brushing, boom covers, deflectors, half-logs, brush bundles, bank stabilization, and artificial spawning beds." (page 6)

No mention is made, however, of the value of the existing structures.

The Plan does not discuss how acquisition of the additional lands and their placement in public ownership is going to reduce the pressure for firewood permits or the incidence of firewood theft.

DNR RESPONSE: Although there is excellent natural trout reproduction in the upper portions of the stream system, there is a noticeable lack of stream cover to hold larger fish in many of the upper stream sections. Existing habitat development, such as brushing, riprap bank stabilization, deflectors, and boom covers have been successful at accomplishing those intended purposes.

The pressure for firewood permits is expected to remain high; however, the property of the Mecan River system will be managed as a recreational day-use area. Firewood permits will be used as a method to accomplish the goals and objectives stated in the master plan.

TOWNS: On the one hand, the state laments the loss of natural areas in private ownership and it professes to urge landowners to maintain and preserve natural areas and wildlife habitat, and on the other, when landowners do these things, the state wants to take the land away from them.

Of particular significance is the failure of the Plan to explain how acquisition of the additional 1,070 acres and converting it from private to public ownership is going to alleviate public over-use of the area. Certainly, further development of the area as a public recreation area is going to encourage even greater public use, increase crowding, increase trespass on neighboring lands, increase vandalism, increase fishing pressure, increase conflicts between fishermen and canoeists, and increase unlawful trespass with motor vehicles, illegal camping and littering. The Plan is not, after all, going to create any new land, it is simply going to convert it from private ownership, where the existing landowners have some degree of control over public access and use, to public ownership, where public access will be facilitated and where public use will be encouraged by the mere fact that it is public land.

DNR RESPONSE: The more public land available, the less crowding occurs. If there were no public lands, there would be extreme pressure and real conflicts between would-be fishermen and hunters and landowners. There are already problems now on some streams between fishermen legally wading a section of navigable stream and private landowners.

TOWNS: The Plan acknowledges the wildlife values of the area in its current state (page 15), but, except for noting that,

"Lands are heavily hunted during the deer-gun season." (page 13) and,

"During the gun-deer hunting season and opening weekend of trout season, crowding reaches undesirable levels and causes unpleasant, and in some cases, unsafe conditions." (page 22)

it provides no basis for comparing the annual hunting and trapping objectives (page 1) of the Plan with what already exists.

In fact, despite the fact that heavy hunting pressure and crowding during the gun-deer season already are problems, the Plan notes that,

"Hunting pressure on public lands can be two and one-half (2 1/2) times the pressure on surrounding private lands." (page 13)

What the Plan does not explain is how converting more land from private to public ownership and adding six (6) more parking lots to increase public access (page 6) is going to reduce hunting pressure, reduce crowding and reduce unpleasant and unsafe conditions during the gun-deer season.

DNR RESPONSE: Overcrowding is an undesirable condition on some public lands, but this should not negate the need for such land. Such crowding points out the need for more public lands. If no public lands existed, pressure on private landowners would be extremely severe.

Improved accesses and broader distribution of parking lots can help spread out the public use.

These overcrowding conditions are generally of short duration occurring during less than 5% of the year. Such short-term high numbers may be aesthetically unpleasant to some, but should not drastically effect the resources of the area.

TOWNS: The Plan does provide some information to permit an evaluation of its impacts on recreational fishing. According to the Plan, the entire Mekan River System currently provides 15,870 man-days of fishing through the fishing season, with a catch rate of 0.5-0.6 trout per hour (page 13). Under the proposed plan, this would increase by 1,280 man-days and 0.1-0.2 trout per hour (page 1).

If it were assumed that a man-day of fishing represents 8 hours of actual fishing, then the Plan would increase the catch by 1,024 to 2,048 trout per year (1,280 man-days x 8 hours = 10,240 man-hours x 0.1-0.2 trout increase per hour = 1,024-2,048 trout per year increase).

If the \$1,054,000.00 acquisition cost (page 6) and the \$190,000.00 habitat development cost (page 6) are considered (and annual maintenance costs are ignored), the costs of the proposed Plan, if invested at an interest rate of nine (9) percent, would yield \$111,960.00 annually.

Thus, in interest alone on the initial costs of the Plan, each additional trout is, in effect, costing the taxpayers of Wisconsin from \$54.67 to \$109.33. The question might be asked whether there are better ways in which tax revenues could be expended to provide recreational opportunities for the citizens of Wisconsin -- such as the acquisition and development of lands which are not already providing high quality fishery and wildlife values.

Of course, proponents of the Plan will argue that the benefits of the Plan are not limited to providing an additional 1,000 to 2,000 trout per year, but it is important to note that none of these additional implied benefits are quantified or documented in the Plan.

If the Plan would result in each fisherman catching an average of one more trout per day (0.1-0.2 trout per hour increase x 8 hours = 0.8-1.6 more trout per day), the question must then be asked whether the fisherman would rather catch that one additional trout (he can now expect to catch 4-5 trout in 8 hours), or have \$55.00 - \$110.00. If he would sell his chance for that additional one trout per day for less than \$55.00 - \$110.00, then that means he does not consider the benefits of the Plan to be worth the costs.

DNR RESPONSE: The interest calculations that the Committee makes are very misleading. Only a fraction of the total acquisition costs and habitat development costs will be incurred in any one year. The benefits, however, are realized for many years and for generations yet to come. There are multiple recreational uses which further add to the use and value of the property. Experience has proven that it is a wise investment to protect and preserve the integrity of the River Systems. Approximately \$400,000 are generated annually through the sale of inland trout stamps to persons interested in trout fishing and trout habitat conditions. This money is earmarked for trout stream habitat management practices and can be only used for this purpose. Materials used in the construction of stream channel choices are durable, have a long life and are unobtrusive in the environment. Initial costs of habitat management are high but pro-rated over a 25 year or more life expectancy, justifies the initial development costs.

TOWNS: It should be noted that, although the Plan extolls the virtues of "this natural and beautiful area" (page 11) in its current state, the forestry management proposed in the Plan is designed to destroy the natural character (page 9), the rest of the forest will be subjected to "plantation management" of the area. Although aesthetics will be considered "along high use areas" and "sustained yields" (page 9) and timber, pulp or firewood sales" of a "commercial nature" (page 9). Of course, "scattered den trees" will be left for raccoon, woodduck, squirrel and cavity nesting birds (page 9) (as in the Weyerhaeuser advertisements), but red and white pines will be managed on a sawtimber rotation (page 10), jackpine will be clearcut on a pulpwood rotation (page 10), and firewood permits will be used to "achieve goals not practical through commercial sales" (page 10). In effect, the Plan proposed to convert this "natural and beautiful area" into a commercial logging and pulpwood operation, and then to turn weekend woodcutters loose to clear the remnants.

It would seem that an inquiry into the justification and the motivation for the proposed commercial timber and pulp operations on public lands should be launched. Is there an interest by commercial timber and pulp cutters in this area? If so, what influence have they exerted in the promotion of the Plan by the DNR? If not, then why is the DNR promoting commercial logging and pulp operations on public lands? Is commercial logging and pulpwood cutting really necessary to manage this area and,

" . . . to preserve and enhance the Mecan River System Fishery Area in Marquette and Waushara Counties for trout fishing and other recreational and educational activities (and) maintaining an aesthetically pleasing area"?

At the very least, the DNR should provide extensive and detailed explanations and documentation to demonstrate that the proposed commercial logging and pulpwood operations and non-commercial firewood cutting will not detract from the existing high fishery and wildlife and natural values of the area, and its current recreational use. Indeed, before implementing, or even proposing these practices, the DNR should provide clear evidence that they will, in fact, enhance the fishery, wildlife, natural and recreational values of the area significantly above those currently existing.

DNR RESPONSE: Most pine plantations have a life expectancy of 35-140 years. The determining factors are site quality, stand condition, and species. These factors determine or influence how fast the stand grows, what type of forest products may be produced, and the management operations needed throughout the life of the stand. The ultimate goal of plantation management and all forestry, is three-fold:

1. to produce forest products,
2. to obtain reproduction for the next generation of trees on that site,
3. to maintain a forest cover on a given area to the benefit of the people, land, water, and wildlife.

Management practices such as periodic thinnings, release, pruning, and harvest become necessary to achieve these goals. Thinnings and harvest are operations which pay for themselves in that they yield commercial forest products in the form of pulpwood and sawlogs. Most plantations become commercially valuable at 20-25 years of age, and they increase in value as the stand matures. Maturity of a plantation will also vary with site quality, condition, and species.

Red and white pine may require 80-140 years to reach maturity while jack pine, short-lived by nature, may mature in 35-50 years. A brief discussion of each follows:

Jack pine plantations on the Mekan River system are generally closely spaced, quite tall, and have small green crowns. Past attempts at thinning such stands of like condition, have resulted in severe windthrow, breakage, and blowdown of the remaining stems. The end result is either a clear cut, or a significant dollar loss.

In some cases, the natural seeding of jack pine resulting from a clear-cut may not be of sufficient quantity to assure a quality stand. It becomes a management decision to allow the stand to remain as is, or convert the site to red or white pine.

Red and white pine plantations on the Mekan River system are presently in need of thinning. Height and diameter growth, indicators of the need of such an operation, are slowing. Periodic thinnings should follow the initial one every 5-10 years. Using such methods maintains the plantation's health and vigor, and allows establishment of reproduction, habitat, and continuous forest cover. It also supplies a periodic income and a flow of pulp and sawlogs, over an extended time period.

Failure to manage these plantations will result in reduced growth, insect and disease problems, and a substantial dollar value loss.

In summary, the pine plantations on the Mecan River system, though only on a small percent (approximately 4%) of the total land area, will be managed on the same principles that are applied on private lands. Hundreds of landowners in Marquette and Waushara Counties have conducted plantation thinnings and benefitted from them. Mr. Beutler, Coloma; Mr. Jack Frost, Coloma; and the members of the Crystal Lake Club, Wautoma, to name a few, are examples of persons using such management practices recommended by the same professional DNR foresters that oversee State land. Timber in State ownership will receive similar treatment.

Woodlots or stands other than pine plantations will be typed-mapped and managed according to prescribed guidelines. These guidelines are flexible enough to allow for site quality, condition, insect or disease problems, market fluctuations, or weather conditions.

Each stand will be considered as a separate entity and managed accordingly. Wildlife and aesthetic values are to be incorporated into all management operations, regardless of size or location. In most harvests, timber-stand improvement cuts or salvage cuts, individual trees will be marked and tallied. These volumes will then be advertised on the open market and sold as standing timber. Logs, pulp, and firewood will be the major products. All such commercial sales will be open to competitive bidding by independent loggers. Firewood permits may be used to clean up any logging debris or utilize small amounts of timber unattractive to commercial buyers. All sales will be carefully supervised to see that the terms and objectives of the sale are met.

Loggers have had little interest in the Mecan River system other than the chance to bid on timber when it is offered for sale. Some appear to avoid State sales because of the restrictions and details required by law. Loggers have had no influence on the preparation of the Mecan River Master Plan or the forest management done on the land.

As previously stated, the forest management goal on State-owned woodlands will be to provide habitat, aesthetic beauty, wood fiber, and a balance that will assure the health of the woods, water, and land.

ECONOMIC IMPACT OF PLAN

TOWNS:

We will document what has actually happened to our local tax structure, and illustrate that the information contained in State of Wisconsin Research Report No. R2794 and Department of Natural Resources Publication 2-4300, if at one time was factual, is no longer a valid account of how DNR purchases affect the tax structure of the involved surrounding property owners.

We have randomly selected 160 acres of land within the boundaries of the Master Plan -- acreage that has remained unimproved and unchanged during 20-year tax experience with the Plan. The following is an actual, unbiased, non-prejudicial illustration of what has happened to the property owners, and our alarmed projection of the future. The 160 acre base was used because of the impossibility of obtaining viable figures from any state or local tax authorities or tax monitoring organizations.

Please refer to Exhibit A. This exhibit is a Per Acre Experience Chart of the 160 unchanged acres and the average per acre, 20-year experience with the Department's purported tax reimbursement:

The Department states that through State Aid our lost school taxes will be reimbursed. But actually:

School Tax	1130% increase	\$.62 to \$7.01
State Aid	630% increase	.10 to .63

The Department also states that the Town's tax structure is improved by state land purchases, through its "in lieu" payments per acre of land owned. But actually:

Town Tax	900% increase	\$.06 to \$.55
"in lieu" payments	280% increase	.45 to 1.27

And, while the state reimbursement at present covers Town Tax rates, it is really only an illusion, inflated for a short period of time by the declining 10-year tax reimbursement -- as will be shown in our projection.

Further, County Taxes lost on these lands are not reimbursed in any way:

County Tax	1000% increase	\$.26 to \$2.57
Reimbursement	-0-	-0-

All while the counties are experiencing constantly increasing pressure on road building and maintenance, land fouling and on the Sheriff's Department -- not only from its own citizenry -- but also from the geometrically increasing growth in users of these acres. The Master Plan states that these lands are easily accessed to 3.5 million people. We are apprehensive and almost fearful. We can't project or visualize the effect of the pressure of these numbers on two counties supported by the resources of a population of approximately 40,000 people.

Exhibit A

Per Acre Experience Chart

axes
/acre

\$8

- - School Tax/A 1130% increase)
- - School Aid/A 630% increase)
- - Town Tax/A 900% increase)
- - DNR Payment/A 280% increase)
- County Tax/A 1000% increase

\$7

\$6

\$5

\$4

\$3

\$2

\$1

.50

0 /

62

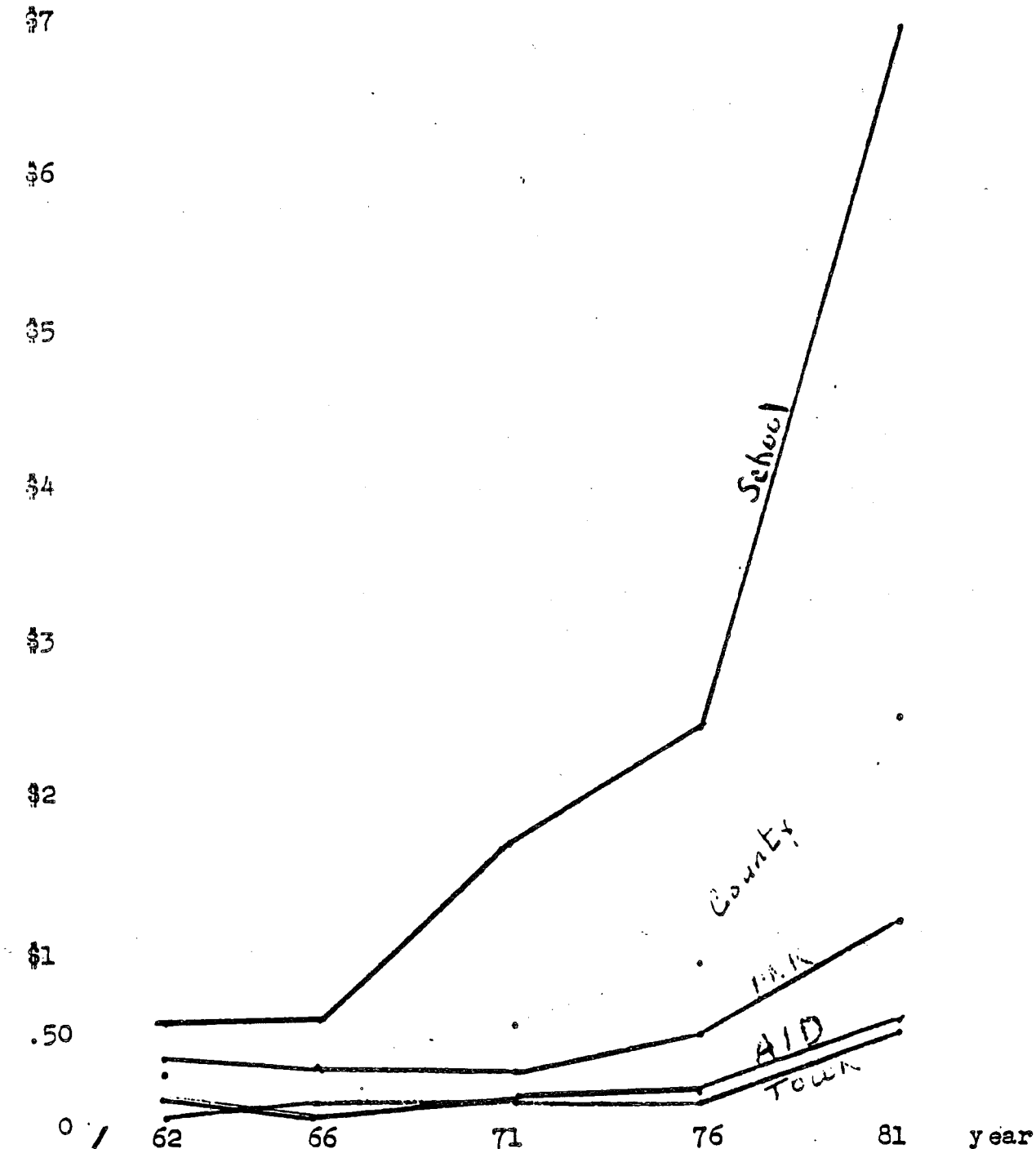
66

71

76

81

year



Please refer to Exhibit B. We have prepared a tax projection of the next 25 years based on our actual experience of the prior 25 years, on a 40 acre parcel -- a parcel purchased by the state in 1982. The figures are so astronomical that they couldn't be shown on an equal graph but are depicted on semilog vertical divisions. These actual taxes document an actual tax increase of 2894% over 25 years. Projecting these trends (5% of tax to towns, 25% to county and 70% to school) results in a tax effect for the next 25 years of:

\$63,200 loss of School Tax
\$22,600 loss of County Tax
\$ 1,700 loss of Town Net (tax \$4,500, less "in lieu" \$2,800)

These 40 acres represent 2.5% of the tax base loss in the Town of Richford alone in 1982 (approximately 1,600 total DNR acres), and 1.7% of the 1983 loss (approximately 2,300 acres) of the tax base of the Town in 1983 through purchases, Woodland Tax Law and Forest Crop Law. In other words, based on 1982 acres, these losses for the Town of Richford alone, could conceivably be multiplied by 40.

These are not figures generated by capricious taxing policies of local governments, but mandated by the State of Wisconsin Department of Revenue estimates of land values and assignment of tax share. In 1958, Richford's swamp and waste land had a State value of zero -- in 1982, the value was \$97,400. In 1958, forest lands in the Town were valued at \$19,500 -- in 1982, the State assigned value was \$4,202,900. We are told that the State's calculations are not influence by DNR purchases. BUT -- if even one parcel privately changes ownership in competition with the DNR, the values are inflated.

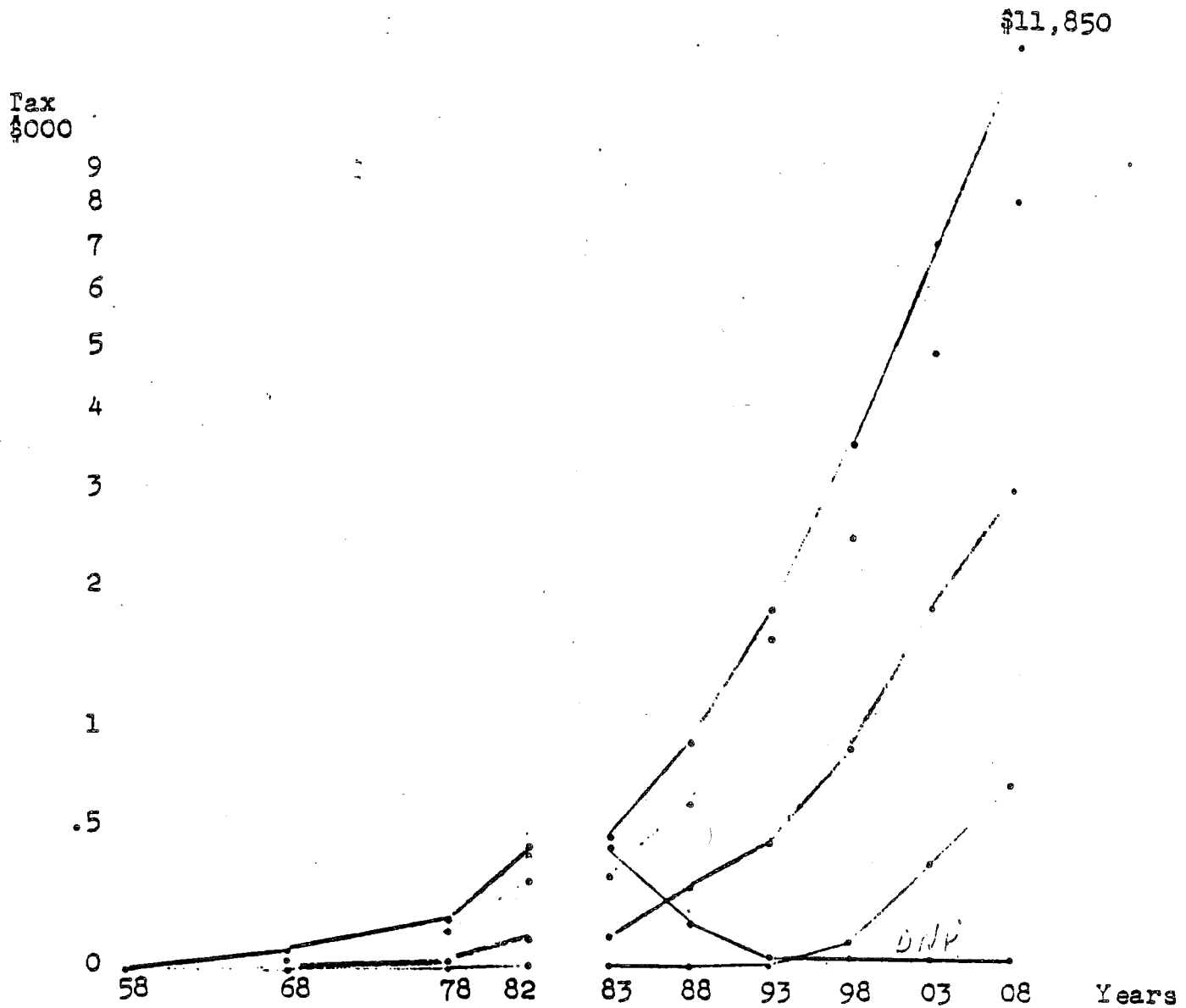
DNR RESPONSE: Property tax impacts generated by public land acquisition have been studied for the last few years by the University of Wisconsin and the State Department of Revenue. A 1983 University Extension Bulletin (G3240) - "The Effect of Public Land on Property Taxes", which is attached, emphasizes that there is an insignificant impact on local taxes when the Department purchases property and it is removed from the tax roll.

In 1983, a Wisconsin Department of Revenue computer-designed tax analysis was completed for nine townships in Waushara County. These were made available to the public and they also indicate that public land acquisitions have little or no impact on local taxes. In fact, there is evidence to suggest that in townships with high percentages of state land, taxes are lower than in townships with no state land, i.e., taxes are higher in the township of oasis with no state land, than they are in Dakota and Richford. If there is a need for more tax impact analyses, they can be made by the University or the Departments of Revenue or Natural Resources.

However, it must be pointed out that unless there is some unique or unusual circumstance, these tax impact analyses will merely reaffirm all the other previous studies that have been made and they will conclude that property taxes will not be affected by state land purchases.

Exhibit B

25 YEAR TAX PROJECTION



- - Trend Line - Total Taxes
- - School Tax - \$ 63000 taxes lost school
- - County Tax - \$ 22600 taxes lost county
- - Town Tax - \$ 4500 taxes lost town
- - DNR Payment- \$ 2800 DNR payment

Tax Projection - Shown is 25 year actual experience
 Projection for 25 years based on this experience
 40 acre parcel

In 1983 a Wisconsin Department of Revenue computer-designed tax analysis was completed for 9 townships in Waushara County. These were made available to the public and they also indicated that the DNR land acquisition program has little or no impact on local taxes.

TOWNS: We have, gentlemen, a genuine, documented fear of the future! While we have tried to retain a factual, mathematical, unbiased account of what has happened to us and provide a projection of the consequences of the State's actions based on past experience, we feel we must provide an illustration.

In 1962, a couple in our area sold a 99-year easement/lease to the Department for \$1,000.00. It consisted of 23 acres through approximately the center of an 80 acre parcel -- along the Wedde Creek. At that time, this parcel was part of a working farm. The taxes on this parcel were \$75.00. These people were relatively young and this appeared to be a pretty fair business deal. Twenty years later, the farm is abandoned. The farm buildings have deteriorated and are virtually unused. The home is over 100 years old and unimproved. These people are in their 60's and retired. And the taxes on the 80 acres are \$900.00. The land is unsalable to private parties and probably unsalable to the DNR. The Department has been contacted both locally and in Madison about this outrageous violation of the resources of these people -- and they admit there is a problem -- but apparently there is no solution! We hope you can see how these people are paying for the effect of our 20 year experience. (We, the Committee, hope that, even if this effort to improve the situation in this area is wasted, that some form of relief is provided to these people before the land is obtained by default.)

DNR RESPONSE: The Department has been purchasing easements for more than 20 years. Properties all over the state with DNR easements have sold on the open market providing that conservation easements do not make properties unsaleable. In fact, in some instances, easements enhanced property values. Most realty is encumbered by various types of easements and only in a rare situation could an easement prevent sale. Easements may effect value in but not to the extent that the property is unsaleable.

TOWNS:

Please refer to page 2, last paragraph, of the Master Plan:

"Preferably, all parcels should be purchased in fee title. . . ."

The Department is paying such inflated prices for these lands that it is a foregone conclusion that there will be little large-acreage future private sale. In Research Report No. 2974, they use as illustration \$78.00 per acre land. Their calculations of "in lieu" tax payments may be viable on low-priced land, but in actuality recent sales include:

16.76	acres	Wichner	\$30,000.00	\$1,790.00 per acre
20	acres	Wichner	\$50,000.00	\$2,500.00 per acre
7.4	acres	Prochnow	\$13,800.00	\$1,865.00 per acre
20.5	acres	Strobach	\$45,100.00	\$2,200.00 per acre
78	acres	Anzare	\$75,500.00	\$ 968.00 per acre
40	acres	Kapp	\$32,000.00	\$ 800.00 per acre

The Department's calculations simply do not prove effective on this value land.

DNR RESPONSE: All public agencies including the Department of Natural Resources are required by State and Federal law to pay the fair market value for any property purchased. The above listed properties were all purchased at fair market value.

Research Report G3240 has been updated by the University of Wisconsin and the State Department of Revenue. This updated report indicates that Department land purchases do not have a negative impact on the local taxes. In fact, in most instances, local units of government benefit because the Department's in lieu of tax payment exceeds their share of the tax bill.

A 1983 report (copy attached) "State Cost to Acquire/Recreation Land Compared to Market Price" concludes that Department prices have been at a reasonable level and have been consistent when compared with rural land prices paid in the private sector.

TOWNS:

"... but acquisition in perpetual easement will be considered, if necessary. . ."

This statement appears to be a threat. Does the Department feel they now have, or can obtain rights to force these easements? We have already documented our experience with an easement.

DNR RESPONSE: All past, present, and future land acquisition along the Mekan River System has been and will continue to be from willing sellers only. If a landowner is willing to sell either an easement or fee title to the property, the Department will consider the offer. No threat was intended or implied, but the statement will be rewritten so there is no misunderstanding.

TOWNS:

"land acquisition priority will be given to those parcels . . . with a high development potential. . ."

It appears that the Department is restricting our potential for orderly growth -- the only possible way we can ameliorate the effect of our confiscatory growth in taxes.

"... which if owned by private interests, could seriously detract from the recreational and aesthetic values of neighboring state-owned lands."

These lands have achieved their potential through ownership by private interests. We challenge the DNR to provide examples of "seriously detract from values of neighboring state-owned lands." And, we can in fact provide many examples of exactly the mirror effect. State ownership does seriously detract from the recreational and aesthetic value of neighboring privately-owned lands.

DNR RESPONSE: State ownership prevents the breakdown of large parcels into subdivisions of small recreation lots which if not properly designed detract from aesthetic values. The Department is not interested in preventing private development. It agrees with the committee that orderly growth is desirable and believes that public and private interests can and should complement each other.

TOWNS:

OTHER EFFECTS OF PLAN

There are other costs to our area which are very apparent to us -- costs that cannot be documented in dollars:

1. Maintenance of Town and County roads that are supported by a population of 40,000 -- with a projected access to use by 3.5 million people. Admittedly, we get some state aid, but it is based on miles, with no provision for this expanded use.
2. Parking places provided by the Plan work out to parking for approximately 630 visitors (42 lots x average 7.5 places per lot x average 2 visitors per car). Parking now is mostly on narrow road shoulders and private property, which creates attendant damage, clogging, and litter.
3. The State has no provision for cleaning up after its visitors. The unsightly messes are now taken care of by private property owners and the county.
4. It is significant that the DNR finds it necessary to "close" 80 acres at the Youth Camp to "protect their investment" while they provide little protection for the much greater investment they propose to abut. Every abutting property owner has horror stories to relate about the hunting and fishing users violating our personal and property rights.

DNR RESPONSE:

The amount of additional public use of these roads is not expected to have a serious detrimental effect on town and county roads. Additional parking lots will provide for needed off road parking which will help alleviate "clogging" and road shoulder damage.

DNR resource managers recognize the need of proper maintenance of state-owned lands. Presently, funds have been allocated toward policing, posting, land surveys, and parking lot maintenance. If additional funds are needed, a still higher priority will be given to land maintenance, and monies may be redirected from other projects. Crews from the Mecan River Youth Camp and interest groups such as Trout Unlimited will be utilized to help defray costs.

Private landowners have the same right to control hunting on their land near buildings. Since the youth camp is not manned during the majority of the year, the task force believes that this closure is justified. Although trespassing does occur, this violation is not limited to lands adjoining state properties. Trespass problems are noted on private lands throughout Marquette and Waushara Counties.

TOWNS:

CONCLUSION

In summation, the Committee also feels that these lands should be preserved and enhanced, but we wish to make several points that are apparent to us:

Environmentally - The State does not appear to have the financial resources or manpower to "preserve and enhance" the land that they now control much less expanding as they propose. We also feel that the resource was and is being preserved and enhanced equally as well by private interests as by the DNR influence.

Economically - The State, both in extent of ownership, degree of influence and lack of financial responsibility of ownership, is not sharing in the financial burden of this area.

Personally - The State, as a personal entity, is not a good neighbor. The overbearing attitude, steamroller tactics, and lack of personal responsibility for their assets and actions are formulating an adversary relationship with its neighbors.

Respectfully submitted,

Committee for the Study and Research on the Master Plan - Mekan River System Fishery Area

DNR RESPONSE: The Department cannot agree with the committee's environmental conclusions. Public ownership and control has protected and enhanced the natural value of the Mekan River and its tributaries. Habitat improvement and development have occurred along much of the river, sources of non-point pollution have been abated, a program of maintenance has been implemented, and the Department has planned a sound fiscal commitment for the future. While certain individuals may protect a small portion of the river, only through a program of cooperation and mutual trust between all public and all private interests can the entire Mekan River watershed be preserved and enhanced for future generations.

While the state does not pay property taxes, the entire aids in lieu of tax payment goes to the townships. In Waushara County about 8% of the property tax levy is used for local taxes. Therefore, the local government tax levy benefits when 100% of the property tax is paid to the township. After ten years, when the payment is down to 10% it is still greater than the local share is under private ownership. The rate of taxation or the amount of property taxes paid in Waushara County in any township has no relationship to the amount of public land located in that township.

The rate and amount paid, as aids in lieu of taxes is determined by the legislature. Any changes require legislative action. Historically, there have been several changes and it is possible there will be others sometime in the future: the Department's role is to implement the provisions of the law - whatever they may be.

Economically, the State does share in the financial responsibility as has been noted in previous comments about taxes. Also, it is worth noting that the people who utilize the Mekan River System property contribute money to the local area in terms of supporting restaurants, motels, grocery stores, sporting goods stores, hardware stores, etc.

Department representatives located at Berlin, Montello, and Wautoma have tried to do their jobs with good faith and honesty. They have met personally with most of the landowners and are not permitted to use any of the techniques alluded to. The Department does not believe its employees have deliberately engaged in these activities and unless it receives information regarding who, when, and where the actions took place it cannot change its position. Department employees must treat all landowners impartially, always bearing in mind that they are agents of the State of Wisconsin with a responsibility toward the state and a duty to deal fairly with all citizens.

Attachments To The Township Research Committee Report Follow:

August 1, 1983

Mr. Harlan Beutler
Chairman, Richford Town Board
Rt. #1
Coloma, Wisconsin 54930

SUBJECT: DNR Management of Fish, Game, and Natural Beauty Mekan River System
Fishery Area

Dear Mr. Beutler:

As private property owners in the Mekan Springs Headwaters area, we feel it is our obligation to respond to some of the politically motivated fabrications contained and expressed in the Master Plan for the Mekan River System and related tributaries. In other words, we want to set the record straight on how we believe the entire area has been mismanaged under the direct control of the DNR. A few examples follow:

On natural beauty preservation and/or improvement:

- Sand bogs and mosquito beds are quite prevalent under DNR "management" of water levels. Sightseeing or boating visitors have become passersby in the last few years. They have recognized the fact that the beauty and fishing have gone consistently down hill.
- Hundreds of beautiful pines were literally mowed down in order to create a flyway for Canadian geese. This path destroyed a tremendous amount of aesthetic beauty and the geese do not use it as anticipated. What an error.

DNR RESPONSE: The DNR does not control water levels on Mekan Springs.

The total number of trees removed was probably less than 100 and consisted of immature pines. The removal of these trees has provided an open vista that to most is considered more aesthetic. The original vegetation of Waushara County

consisted of oak savannas, many of which would have had broad open vistas; therefore such openings are more natural than stands of dense pine plantation. The open area provides visitors an opportunity for viewing geese and other waterfowl without going to the lake and disturbing the birds.

MR. AND MRS. PRITTS:

On the introduction of carp to the river system:

- In the late 1950's the DNR allowed carp to enter the river via the "managed" Germania marsh. There was supposed to have been an electric weir, as the DNR then stated, to prevent just such a catastrophe. There wasn't! Consequently, carp forever.

On fishing:

- The carp have destroyed most of the weed beds, which were a normal part of the natural river.
- Bass are now at a premium.
- Perch, bullheads, and blue gills are virtually non-existent. Twenty to thirty years ago one could catch his/her limit(s) in a matter of minutes.
- The Mekan is classified a trout stream. I can count on one hand the number of trout fisherman that even bothered to come out to the headwaters in 1983.

DNR RESPONSE: A resident carp population exists in the Mekan Springs. Fishing surveys dating back to 1960 have shown that this species was present. A drawdown of Germania Marsh in 1963 prior to installation of the weir resulted in a movement of carp and northern pike upstream into portions of the Mekan River System below the Mekan Springs area. Carp removal operations, utilizing shocker boats, from Germania Marsh upstream to the outlet of Zinke Lake on Section 26, T18N, R9E (Figure 3b) resulted in the removal of several tons of migratory carp. No additional carp were found from this point upstream to the bridge crossing immediately below the spring area in Section 8. A mass movement of carp from Germania to the springs area did not take place. The efficiency of the electric weir has been checked during drawdown periods following installation in 1964. It has been a very effective device in the control of the movement of carp and northern pike out of Germania Marsh during drawdown periods.

Overall abundance of aquatic vegetation was listed as quite common on a 1960 survey report. Dominant types were waterweed (*Anacharis canadensis*) and a form of algae known as Muskgrass (*Chara* sp.). The latter occurs in hard water. A survey report in 1967 lists waterweed and muskgrass as very common along with a heavy algae bloom of filamentous and blue-green types.

Largemouth bass were the dominant game fish present in survey samples of Mekan Springs in 1960, 1967, and 1971. An excellent population of bass was present in 1960 with an extremely large year class of young-of-the-year bass. In 1967, the common white sucker and bullheads were the dominant fish species found with a large reduction in bass numbers. In 1971, a very impressive sample of adult bass was sampled with fyke nets, a type of sampling gear not particularly known for its ability to sample bass populations. A very large sucker population was found in 1971 along with an excellent population of good sized bullheads with this species making up the bulk of the catchable population of panfish species.

Fish populations in lake-like environments such as is found in the Mekan Springs are dynamic and ever-changing. The ability to produce a sustained fishery depends on a wide variety of inter-related factors such as annual weather conditions, water quality, levels and temperatures, suitable spawning and nursery areas, the aquatic food chain and competition of different fish species for the available food and space provided by the water area. Over a period of time, nature and man induced physical changes that contribute to gradual changes in any water environment.

Agreed, there are few trout present in the Mekan Springs proper. An occasional trout is caught, but warmwater species of fish have in the past, and will continue in the future, to dominate the fishery. Mekan Springs is a natural springs area connected to the trout waters of the Mekan River. By definition, it is considered trout water under Section 20.06(1)(a) of the Wisconsin Administrative Code.

MR. AND MRS. PRITTS:

On wildlife:

- Duck populations are now becoming rather sparse.
- There are not nearly as many Canadian geese on the headwaters as in years past.
- The deer population has been managed so well that 40,000 additional permits must be issued in 1983 to "clean up" the DNR miscalculations.

DNR RESPONSE: The duck population has fluctuated in Waushara County at similar levels in other areas. Some reductions may have occurred due to reduction of nesting habitat because many grassy meadows and open fields have reverted to brush and timber. Part of our effort along the trout streams will be to plant and manage prairie grasses to provide more nesting habitat for ducks.

The Canada goose population has not gone down, but the birds are more widely dispersed.

Total either-sex permits available for all of Wisconsin is about 40,000. The high deer population is due to a variety of reasons including the following: high fines have reduced levels of poaching; mild winters have minimized winter loss of deer; and past resistance by sportsmen to high quotas has caused quota

numbers to be less than desired by wildlife managers. The quota system is not infallible, but it is a good system, and if allowed to function properly, can help maintain the deer at deserved levels.

MR. AND MRS. PRITTS:

Obviously, from the above statements, the DNR has either been incapable, inept, or perhaps unwilling to manage properties they now possess. What makes them, or anyone else for that matter, believe they could or would manage any additional property effectively? The Master Plan says they can. Common sense and history demonstrates they can't or won't!

I will anxiously await a reply on the results obtained by your board and it's committee with regard to the entire Master Plan and its effects on the whole, including inevitable tax increases if it goes through. Will the citizens have a say-so with our input or will we just receive another arrogant, irresponsible NO from the state?

Sincerely,

G. Robert Pritts
Cherryl S. Pritts, et al.
Rt. #1 Hancock, Wisconsin

DNR RESPONSE: Numerous examples of well-managed state lands occur around the state. Good wildlife management should maintain healthy populations of wild animals, while also maintaining a very natural environment. Therefore, good examples of wildlife management may look just like "wild land" to the untrained observer.

The DNR is mandated to preserve, maintain and manage for multiple use on state-owned lands, but because of manpower and equipment planning requirements, management often cannot be accomplished instantaneously after acquisition. However, when funding becomes available, the professional resource managers of the DNR are expected to produce as high quality habitat as manpower and costs allow.

The following is from Warren Goehrs, Professor Emeritus, University of Wisconsin-Oshkosh, Rt. 1, Wautoma, Wisconsin

The land administered by the DNR along the Mecan River at the present time due to their mismanagement clearly shows why the trout population is limited, they have cut brush, trees, etc. thus opening up former spawning and bank cover. The DNR claim stocking is required to maintain fishable population, what they should really say "our trout hatcheries are not raising trout for our streams, as we used to because we are too busy raising trout for Lake Michigan."

DNR RESPONSE: Woody streamside vegetation, if overabundant or lodged in the stream, creates problems of unstable banks, siltation, loss of instream cover and food production as well as undesirable channel modifications.

Trout stocking is not done on the majority of the water included in the Mekan River System Fishery Area because natural reproduction, recruitment and survival of naturally reproduced fish are adequate to support a reasonable return for angler efforts without supplemental stocking of hatchery fish. Habitat protection and improvement will help insure this condition in future years.

Annual stocking is carried out in those sections of water where natural reproduction is lacking and stream habitat conditions are favorable for yearling age fish. The quotas of trout planted in such sections have remained stable for the past 15 years. There is no correlation between stocking quotas on inland streams in central Wisconsin and the establishment of quotas for the Lake Michigan fishery.

MR. GOEHRS:

In regard to the fish barrier the DNR put in the Germania Wildlife Area - it is a big joke to all that see the carp coming into the Mekan River, surely the Mekan River can never come back to one of the outstanding trout streams in Wisconsin if the DNR continues to mismanage due to so called lack of funds, personel, etc. to maintain and monitor this fish barrier.

DNR RESPONSE: The Mekan River is one of the outstanding trout streams in Wisconsin. Limited numbers of rough fish have been present in the Mekan since their invasion into the Fox River system before the Germania Wildlife Area was established. The electrical fish barrier at the Germania Marsh has prevented large numbers of undesirable warmwater fish from migrating into the fine trout waters of the Mekan River System.

MR. GOEHRS:

Having trout fished in this area for thirty five years, I would have to disagree with the statement made in the Mekan River System report that it is over used today - what will happen if and when the land is under control of the DNR - then opened up to the general public - surely then and only then will crowding reach undesirable levels and cause what the DNR call unsafe condition.

DNR RESPONSE: Heavy angling pressure is present on opening weekend and on some holiday weekends. Additional land purchases, whether in fee title or easements, would provide increased accessibility to the stream system and help spread out the fishing pressure.

MR. GOEHRS:

Having parked in DNR parking areas along streams in the Mekan River Area, as a tax payer and Wisconsin resident I am appalled and embarrassed to see the littering not only on the ground, but in the waters like any good trout fisherman thinks - what will this be if the DNR gets its way and buys any more land to so call manage, police and administer.

DNR RESPONSE: DNR resource managers are well aware of the need and importance of managing state-owned properties and have given a higher priority to funding land maintenance. Crews from the Mekan River Youth Camp and Trout Unlimited are expected to help defray the costs.

August 4, 1983

Dear Sir:

As a interested citizen, I hope the DNR sees to leave the land in Waushara, Marquette county alone.

I don't wish to see anymore land destroyed or taken from tax roll. The DNR have destroyed much of Wisconsin already and I do hope they stop this at once.

Sincerely yours,

Llewellyn D. Owens, Sr.
R.R. #1
Montello, WI 53949

DNR RESPONSE: The purpose of the Department's land acquisition policy on the Mekan River system is to preserve and protect the natural resources involved and to provide access for the general public.

2248N

All letters and comments that follow were submitted to the Department of Natural Resources in response to the 45-day review issue of the master plan:

Dr. William A. Flader, Madison, Wisconsin

I understand there has been considerable opposition to the Mekan River Master Plan by area landowners, despite the practice of buying property only from willing sellers.

As a (small) property owner on the upper Mekan and a trout fisherman, I am supportive of the Department's efforts to protect this and other trout resources from "development" by private landowners of the "new breed" who seem to have to build homes, grow and fertilize lawns, cut brush, and generally apply city ethics to a still mostly natural environment.

As Aldo Leopold pointed out many years ago there is little economic incentive for individuals to do anything for the public good, and riparian landowners are no exception. We assign this often unpleasant task to government, in this case DNR, which unfortunately is viewed as an adversary by many landowners who mistakenly feel that no one should have a right to tell them what they can do with "their land".

As a property tax payer in 3 townships affected by the plan, I am perfectly willing to pay a tiny bit more (resulting from the changed tax base) in order that all of us can enjoy fishing and recreational resources relatively unspoiled and unabused by the crowds that result where there is too little resource for the demands placed upon it.

DNR RESPONSE: Thank you for your comments.

Mark F. Brosseau, Oshkosh, Wis.

I am writing to voice support for the DNR land acquisition program which, I believe, is still under the ORAP program. I understand that at the public meeting on the Mekan River Fishery Area master plan, a great deal of criticism of the plan was expressed by those in attendance. I would like to express my view, which is that ORAP and similar programs are probably the most vital and important function that DNR has. I feel that public land acquisition must be continued, and increased if possible.

Dale Peterson, James Hlaban and S. Richard Bornslaeger all of Neenah, Wis., supplied identical letters that stated:

As a trout fisherman that is concerned about the preservation of our cold water resources, I support the DNR's master plan for the Mekan River. I urge the DNR to continue to pursue land acquisition on the Mekan to insure the preservation of this trout stream and provide public access to this natural resource.

Michael P. Stapleton, Montello, Wis.

Please consider the following comments on the master plan for the Mekan River System Fishery Area.

I am in support of the goals, objectives, and recommended alternatives of the plan. I do all of my trout fishing and grouse hunting in this area on these public lands, and am grateful for the opportunities the Department has provided for me and others through its acquisition and management programs.

I favor continued acquisition of critical areas along these streams, particularly in the headwater areas. I have long felt that the most important step in assuring the future of the coldwater resource lies in controlling (owning) the adjacent lands and keeping them in their natural state. I hope to see this policy continued, and even expanded to include lands originally included in previous years but later eliminated.

I have one technical objection to the contents of the plan. On page 14, two soil associations, the Delton-Briggsville-Mundelein, and the Granby-Tedrow-Moundville, are referred to as muck or peat soils. This is incorrect. None of these soils have muck or peat in their typical profiles, although they are commonly found adjacent to the Houghton-Adrian soils.

DNR RESPONSE: The task force thanks you for noting this error and has modified the master plan text accordingly.

MR. STAPLETON:

At the Wautoma public hearing, many persons voiced complaints about trespassing and littering in areas near the public lands. I agree that this is a serious problem requiring more attention and more vigorous enforcement. Department employees stated at the hearing that budget requests for funds for maintenance of state lands, which included litter pickup, have been cut by the Governor. This is a serious mistake, since litter problems provide an avenue of attack for persons who would oppose the Department's acquisition program. I would hope that the Department would fight to have these funds restored in the future.

I note that when the stated acreage goals are met, many critical areas within the boundaries will remain unprotected. The potential will still exist that development or drainage on these remaining lands will damage the system to the point where previous management efforts will be undone. I feel, therefore, that not only must the current acreage goals be met, but that also acquisition efforts must be continued and expanded to include all parcels within the project boundaries having stream frontage.

The Department is to be commended for their efforts to preserve a precious coldwater resource and provide valuable recreational opportunities for those who live where such fisheries do not exist and who cannot afford to own their own little piece of trout stream. We need to insure the future availability of these lands and the opportunities they provide. The citizens of this state depend on the Department to accomplish this task.

Thank you for reviewing these comments. Please convey my support for your program to the Natural Resources Board.

Al Hasselquist, Principal, Riverview Elementary School, Wautoma and
Randy Hasselquist, Teacher, Randolph, Wis.

I have recently read the master plan for preservation of the Mekan River System. I believe it is urgent that this river system be preserved in its natural state.

My son, age 25 and myself have fished the Mekan and all its tributaries for several years.

I have traveled extensively throughout the U.S. and in Europe while I was in the service.

There is no better spring fed natural trout water in the world.

Whatever state and national funding it may take, it should be done.

Many land owners do not care about preserving the streams and the only sure way there is of keeping them pollution free and natural is for the state to purchase, lease or somehow control and maintain them.

Count this letter as two adults very concerned for the preservation of our natural resources. We wholeheartedly support the DNR master plan.

Ray A. Piehl, Wautoma, Wis.

After attending the hearing that was recently held in Wautoma regarding the Mekan River I have only one comment.

I was very disappointed to hear that the DNR has decided to cut the number of acres that they are planning to purchase for the project, and strongly feel that you should go back to at least the original total acres.

I am a land owner in the Tn. of Dakota.

Cynthia A. Morehouse, Director, Bureau of Environmental and Data Analysis,
Department of Transportation, Madison

We have reviewed the Concept Element of the Master Plan for the Mekan River System Fishery Area and offer the following comments:

1. To avoid the development of future problems when you purchase land abutting State Trunk Highway (STH) right of way, we request that you coordinate with:

D.L. Cronkrite, Director
Division of Transportation Districts
1681 Second Avenue South
Wisconsin Rapids, WI 54494
(715) 421-8300

DNR RESPONSE: If necessary, the DNR can coordinate land transactions with the Wisconsin Rapids D.O.T. office.

MS. MOREHOUSE:

2. We recommend that you coordinate with county and township highway officials when purchasing land abutting their highways.

DNR RESPONSE: If necessary, the DNR can also coordinate land transactions with local highway officials.

MS. MOREHOUSE:

3. We believe your estimate of population within 3 hours driving time may be conservative.

DNR RESPONSE: The text has been changed to 4 million people within 3 hours driving time.

MS. MOREHOUSE:

4. We concur in your observation that fuel prices and other socioeconomic factors will contribute to the increased desirability and use of this and other southern Wisconsin outdoor activity areas.
5. As you have indicated, the Mekan River System Fishery Area has excellent access via the highway system, however traffic problems and highway improvements may become increasingly important issues as the region's population increases and pursues outdoor experiences in southern Wisconsin. We believe your planning documents should more fully address this issue.

Thank you for the opportunity to review and comment on this Master Plan.

DNR RESPONSE: Additional parking lot areas and maintenance of existing lots have been addressed in this master plan. This should help alleviate roadside parking and road shoulder damage. The task force does not believe, however, that a limited increase in traffic along the Mekan River System will cause substantial highway damage or traffic problems.

Stan Nichols, Geological and Natural History Survey, Madison

- page 15 - Under Wildlife -
- There is native reproduction of pheasants and quail on the area. Is the status of these two species likely to change for the better with increased cash grain farming in the region?

DNR RESPONSE: Native pheasant reproduction is severely limited in the area; quail reproduction is only slightly better. Due to northern limits of their range and current modern farming techniques, the status of these two species is not expected to change.

MR. NICHOLS:

- Is there any good reason for not including Schmudlack Creek in the area if it is Class II trout water.

DNR RESPONSE: If Schmudlack Creek were included, additional acreage would need to be added to the property boundary. The task force believes that the integrity of the Mekan River System can be better protected if the acreage goal would be used to purchase lands elsewhere within the system.

MR. NICHOLS:

Page 19 Paragraph 2

- Is there logic to trying to "block" the land so that it is contiguous with the Germania area?

DNR RESPONSE: "Blocking" the Mekan River System with the Germania WLA would require adding considerable acreage to the property boundary.

Warrens Goehrs, Crystal Lake Club, Wautoma

Overall View: Good

The master plan is too "wordy" and confusing with so many maps that add to the confusion.

Page 1 - (annual objectives). participant figure are unreal.

DNR RESPONSE: The task force believes that the participant figures used in the annual objectives are realistic.

MR. GOEHRS:

Page 6 - figure for cost per acre is too low.

DNR RESPONSE: See previous response on land costs.

MR. GOEHRS:

It was pointed out at the meeting (Wautoma) that no one can understand why the DNR wants more land when they can not police or manage what they now have - due to funds and personnel.

DNR RESPONSE: See previous responses on land maintenance.

Glenn S. Reinmund, Hancock, Wis.

I attended the public meeting at Wautoma on June 2 to hear about your Master Plan for the Mekan River System and would like to say that I am all in favor of it, but it appeared that some of the property owners along the system did not share my view. They had all types of complaints why they were against it but it all amounted to the same thing, they would like to keep the area for their own use and the heck with the rest of the people of the state which is the wrong way to look at it for everybody has the right to be use of the state waters, well so much for that.

The reason I am sending this letter is to offer you a suggestion that I think needs some fast action at this time. Your people said that they would welcome any serious idea that would be of any help to improve the plan so hear goes.

I live just one and a half miles north of the Mekan Springs on County Tk. GG and like to fish there as it is very private with no shoreline development to spoil the view but I also like to catch a Trout now and then but this is getting next to impossible to do as the Springs are overrun with large carp and I do mean large, no matter where you try to fish they are swimming around your boat and stirring up the mud on the bottom, even the Black Bass are getting very scarce and hard to catch, and this is not because I am a lousy fisherman because my friends say that I am very good especially when it comes to catching Trout so I am not a amateur at this sort of thing for I have been doing it for over forty years. I also go down and check the other fisherman from time to time as I am retired to see if they caught any Trout and nobody ever has any, so it appears that Mekan Springs need some help to restore it to the Trout waters it use to be.

So in your Master Plan for Mekan River System as in any plan to build or improve something you better start at its foundation or it will never amount to anything and in this case that is the Mekan Springs. If you do nothing about all those Carp that are wrecking the springs and do not restock it with Trout than the rest of your plan and all the money that will be spent will be a waste of time and effort. So I have said my piece and hope it does some good, if not at least I have the satisfaction to know I tried.

DNR RESPONSE: Fish Management personnel from the Wautoma Ranger Station will check Mekan Springs to determine the severity of the problem and possible solutions.

Phoebe L. Sorenson, Wild Resources Advisory Council, La Crosse

Overall View - Excellent

Complete, well detailed plan, with commendable long range acquisition and merging recommendations; well appreciated breadth of effort by writer, who visited the area.

- Annual objective #5 & additional benefits are excellent. p. 1
- Outstanding array of wild resources planning p. 9 with many specifics outlined, & well stated. Beautiful underlying understanding of the integrity of these habitats. Further study & inventory plans are very fine p. 11. The written plan is an educational piece in itself.

Additionally, WRAC Chairman Schulties notes the good initial emphasis on land control. He wonders about giving wider protective corridor boundaries; and also possible private landowner education re non-source pollution. Perhaps caution should be observed regarding stream alteration from instream structures.

DNR RESPONSE: Wider protective corridors along the streams would add acreage to the property boundary. A statewide land acquisition goal of 1.3 million acres prohibits adding to the Mekan River System acreage goal. Non-point

pollution control is often expensive. If the private landowner is interested, education and technical assistance are already available through state and local agencies.

Mary N. Hesser, Concerned Citizen, Wautoma, Wis.

Overall View - Poor

Faulty & illconceived plan.

Costs are misrepresented, and in some cases, untrue.

Future burden for the County, State and Local Property Owners is not addressed.

Environmental Impact Statement lacking.

DNR RESPONSE: Some costs were re-evaluated; however, those given in the final draft of the master plan are believed to be realistic. Questions regarding the tax concerns have been addressed in this appendix. An environmental impact assessment was prepared for this master plan and is available for inspection.

MS. HESSER:

p. 6 \$850 per acre is not realistic. Please refer to recent purchases, in particular Strobach and Prochnow purchases and offer for Zinke property.

DNR RESPONSE: The \$850.00 per acre figure will be revised to \$1,000.00 per acre in the master plan.

MS. HESSER:

p. 6 Parking Places - This works out to parking for approximately 630 visitors (42 lots x ave. 7.5 places x 2/car). Present damage to Town & County roads is horrendous.

DNR RESPONSE: The task force does not believe that damage to town and county roads is all attributable to persons utilizing the Mekan River System. Other more probable and contributing causes include local traffic, natural weathering each year, and aging of the road system.

MS. HESSER:

p. 6 Projected cost of habitat development is unrealistic.

p. 6 Maintenance of area cost is unrealistic - \$4000! It is not maintained or policed efficiently at present.

DNR RESPONSE: The task force believes that the estimated cost of habitat development is realistic. These costs were estimated by using actual habitat development costs from other projects.

The task force believes that a maintenance cost of \$4,000 annually is also realistic. Crews from the Mekan River Youth Camp and volunteer help from interest groups are anticipated. Salaries of permanent Department personnel are not included in the calculation.

MS. HESSER:

p. 9 Its significant that the DNR finds it necessary to "close" 80 acres at the Youth Camp to 'protect their investment' when they provide no protection or avenue of redress for much greater investments on the lands they propose to abut.

DNR RESPONSE: Private landowners have the same right to protect their investments by not allowing hunting on their land near their buildings. The task force believes that closing the youth camp area to hunting is valid.

MS. HESSER:

p. 9, 10 Management & Development - I question some of plans and methods, past-present-future. I refer, in particular to goose figures; invasion of rough fish.

DNR RESPONSE: See previous responses by game manager and fish managers in regard to goose management and rough fish control.

MS. HESSER:

p. 15. Schmudlach Creek is largely ignored?

DNR RESPONSE: Schmudlach Creek was not included in the property boundary due to acreage goal limitations.

MS. HESSER:

p. 16. Faulty maps. "A forest reconnaissance study has not been completed" - after 30 years! I find it very difficult to believe that anything can be managed efficiently without a current inventory.

DNR RESPONSE: A comprehensive forest reconnaissance study will be completed when funds and time allow. Many state-owned forested tracts, however, have been individually surveyed.

MS. HESSER:

p. 20 "No architectural, archeological, or historical surveys of the area" There is also no Environmental Impact Statement.

DNR RESPONSE: Architectural, archaeological and historical surveys are conducted by the State Historical Society and are restricted by those funds supplied to the organization by a legislature conscious of the complaints of taxpayers. The Environmental Impact Statement is supplied with the final draft, not the 45 Day review draft of the master plan.

MS. HESSER:

p. 22 Problems - and the funds to assuage them.

p. 23 Private development will reduce aesthetic quality. Not true - private ownership has made these lands desirable to your department.

DNR RESPONSE: State ownership will prevent the breakdown of large private parcels of land into subdivisions of small recreational/residential lots.

MS. HESSER:

p. 24 Analysis of Alternatives - Much bias, too costly, unproven assertions and projections.

The biggest problem was not addressed. The potential burden for the Towns, Counties and State is largely ignored. The research reports generated to prove that this is not so, are faulty and misrepresentational. Please refer to the following studies.

Public Land and Property Taxes, Research Report #R2794. This report was based on approximately \$78 per acre land. It incorporates no inflation of land values or costs. I recommend that you generate research on like lands and, use either actual figures for past ten years and project future, or at least use some realistic inflationary figures. Also, current land costs would disprove these figures.

Publication 2-4300, Department of Natural Resources.

Distribution of property tax may be average for the State, but is not representative for all areas. County tax is ignored. We are assured the State will aid for complete school tax, but is this a true entitlement program?

There are many other problem areas.

DNR RESPONSE: Research Report #R2794 is dated June, 1976. Land values have changed since that date. A new report, "The Effect of Public Land on Property Taxes" is in final draft. The report is written by a Professor of Agricultural Economics, University of Wisconsin, Madison, and by the Director of the Bureau of Local Fiscal Policy, Wisconsin Department of Revenue.

This report is a summary of many studies of the effect of public land on property taxes. Since the 1976 report, there have been many changes which only strengthened the conclusion of the 1976 report that public land has little or no effect on the property taxes of local people.

Publication 2-4300 is a 1983 publication written with the cooperation of the Director, Bureau of Local Fiscal Policy, Wisconsin Department of Revenue. The publication relates to averages because of the impracticality of providing a Township by Township analysis for public distribution and reading.

However, a Department of Revenue designed computer program or tax analysis for 9 Townships in Waushara County was completed in 1983 and made available to the general public. The tax analysis indicated little or no effect of state purchases on the property taxes of local people in all of the Towns studied.

Donald Hasselquist, Landowner, Wild Rose, Wis.

Overall View: Good

Section I, General

As a former Real Estate broker, and present land owner in Marquette and Waushara Countys, I am in favor of the plan as presented by your DNR personnel. These fast dissapearing wild and scenic areas must be preserved now or they will be gone forever.

I have traveled all over the U.S. and Canada and I realize we have in the Mekan river project a unique, beautiful area that must be preserved as quality trout streams are few.

Lee Snyder, President, Fox Valley Chapter, Trout Unlimited

I am writing on behalf of the 134 members of the Fox Valley Chapter of Trout Unlimited. We are very concerned about the Mekan River master plan and would like you to know that we strongly support it. Our members frequently use this fine trout stream and find opposition to the plan difficult to understand. The Mekan River has significant value as a recreational area and should be preserved and extended as much as possible. Our members not only fish this areas, but also spend money in Dakota, Richford, and Wautoma. Some of our members also own property on the Mekan. We support the Mekan River master plan, the acquisition of additional property for public use, and any protective measures which might be appropriate for this resource.

Louis Jirikovic, Sheboygan

I was not able to attend the recent hearing on the Mekan River Master Plan. I hope the project is continued and the land acquisition in the project is doubled, not cut back. The recreational demands on our limited resources, like the Mekan, are going to increase in future years.

The Mekan River as you know is famous to all Wisconsin Anglers. The River receives constant fishing pressure mainly because of its close proximity to Madison and Milwaukee. Last year during the big fly hatch I spoke with two anglers who had traveled from New York just to fish the Mekan River for 2 days. I am sure these anglers bought food, gas, and needed lodging. Our lakes and rivers help to bring those Tourism Dollars in. I am sure the business people in the area appreciated the monies they spent while in the area, even if only they were here for a short time.

Just a thought in closing. What public land will be available 50, 100 or 500 years from now for use by the increased population of our state. Will my sons when they are sixty years old be able to wade and fish the Mekan River for trout?

Roy C. Willey, Jr., Executive Director, East Central Wisconsin Regional Planning Commission, Menasha, Wis.

Subject: Regional Planning Commission Comments - Mekan River

The East Central Wisconsin Regional Planning Commission has reviewed the Mekan River Fishery Area Master Plan. The Commission has the following comments on the plan contents:

Page 2

6. Little Pine River is coded as Little Pine Creek on the Map on page 3. Also it would seem desirable to link this area with the remainder of the project through acquisition of parcels in the SW 1/4 of Sec. 31 and SE 1/4 of Sec. 32, T18N-R10E.

7. It is unclear how the Waushara County remnant acres relate to the project as it is not identified on the map. Is this the same as the Little Pine River Remnant Area?

DNR RESPONSE: Little Pine Creek is not linked to the main system since this area has a lower fishery value, and has a high potential purchase price.

The Waushara County remnant program included a number of streams that were not named fishery areas. All of the acreage purchased on Little Pine Creek was purchased as part of the Waushara County remnant program.

ECWRPC:

Page 6

"If the system acreage goal..." Perhaps a fuller explanation is in order. Does this mean the other land within boundary is presently leased? If so, what are the policies regarding acquisition of this land should it become available?

DNR RESPONSE: The acreage goal is the number of acres approved for purchase within the boundary by the Natural Resources Board. The task force for this master plan recommends an increase in the acreage goal for the system. If that is approved by the Natural Resources Board, it, in turn, becomes the new acreage goal.

ECWRPC:

Page 10

The Commission is supportive of the usage of these areas for hiking and cross-country skiing.

Pages 7-8 and 17-18

It would be helpfull if these maps (Figures 4&5) could be printed on two adjacent pages such as Figure 3.

Page 23

"Excellent highway access..." There are only about 1/2 million people within one hours driving distance of the project.

DNR RESPONSE: The task force thanks you for pointing out this typographical error.

ECWRPC:

Page 24

"Limited habitat management" and "Intensive habitat management" do not stand alone as alternatives. Rather, they should be discussed in the context of the "Do nothing" and "Enlarge project" alternatives. Discussed in this manner there is also the alternative of maintaining the status quo. A different name could be given to the "Enlarge project" alternative to reflect the limited expansion as only minimal acquisition is proposed.

In summary, East Central finds the proposal to be consistent with regional plans for Waushara and Marquette Counties and supports development of the project.

If the Commission can be of assistance during project implementation, please contact us.

Michael Grimes, Cleveland, Wis.

I was not able to attend the public hearing on the Mekan River Master Plan, so I am writing this letter to express my concerns.

First and foremost, I want to see a Mekan River Master Plan implemented.

Second, I want to see the acreage that was deleted from the original recommendations restored.

Third, I want to see additional acreage added, especially in the headwaters.

We must protect this valuable river for ourselves and for future generations.

DNR RESPONSE: The task force regrets that it cannot add to the present recommended acreage goal due to an established statewide land acquisition total of 1.3 million acres.

Bob Meier, Neenah, Wis.

As a trout fisherman that is concerned about the preservation of our cold water resources, I support the DNR's master plan for the Mekan River. I urge the DNR to continue to pursue land acquisition on the Mekan to insure the preservation of this trout stream and provide public access to this natural resource.

Carol A. Engle, Wautoma, Wis.

Our family lives near the Mekan River and its tributaries. We feel strongly that this area should be preserved according to the Master Plan. Once land is lost to development, it is never the same. Please save this for future generations who will need it! Thank you!

Forest Stearns, Chairman, Scientific Areas Preservation Council, Madison, Wis.

We have reviewed the Mekan River System Fishery Area Master Plan and wish to offer several comments.

Carol A. Engle, Wautoma, Wis.

Our famly lives near the Mekan River and its tributaries. We feel strongly that this area should be preserved according to the Master Plan. Once land is lost to development, it is never the same. Please save this for future generations who will need it! Thank you!

Forest Stearns, Chairman, Scientific Areas Preservation Council, Madison

We have reviewed the Mekan River System Fishery Area Master Plan and wish to offer several comments.

With two exceptions, the proposed public use natural area and scientific area classifications are justified and follow our recommendations. In the first exception, Liberty Bluff which we had evaluated as a state significant natural area, is shown as a proposed scientific area. Unfortunately this tract was transferred to the state Department of Transportation several years ago and is part of a major highway wayside. Protection would now have to be negotiated with DOT and public use may already be too heavy under scientific area criteria.

The second exception is public use natural area number one located on Chaffee Creek near Liberty Bluff. Through an error in the description on our form the area is mapped as west of Highway 51; it should be the North 1/2 of the NE 1/4 NW 1/4 of Section 1, 20 acres which is immediately east of Highway 51.

DNR COMMENTS:

- 1) After consultation with Cliff Germain of the Natural and Scientific Areas Section, the text and maps of the master plan have been changed to designate Liberty Bluff as a natural area. Any land use agreements, management, and protection of Liberty Bluff will have to be negotiated with the Department of Transportation.

- 2) The text and maps have been changed to show the correct location of Upper Chaffee Meadow.

SAPC:

The giant Canada goose closed area of 325 acres on Mekan Springs is mentioned in the background material on page 13, but not under proposed management. Since the peak use has declined from 6,000-8,000 birds in the 1950's to about 1,000 now, the causes of decline and management implications should be discussed. It appears that at the minimum the impact of this refuge and resulting harvest of giant Canada geese in the immediate vicinity needs close monitoring.

We appreciate the opportunity to comment.

DNR RESPONSE: The population of geese has not really declined, but geese are distributed over a wider area because of the development of several wetlands in Waushara, Marquette, and Green Lake Counties.

Patrick Lenzner, Trout Unlimited Member, Sheboygan, Wis.

I am a member of Trout Unlimited and wish to express my support for the land acquisition program of critical stream frontage, and particularly as it applies to the Mekan River Fishery Area. Thank you very much.

Robert B. Heding, Oshkosh, Wis.

Page 12. The acreage goals are not sufficient to complete the needed acreage to protect the trout streams or to purchase the stream frontage as planned in the original project proposal. Add 1,200 acres.

DNR RESPONSE:

A statewide state ownership goal of 1.3 million acres was established in 1961 and may not be exceeded. Acreage goals of the waters in the Mekan system and other fishery areas in central Wisconsin were cut so that other projects throughout the state could be established without a state acreage goal increase. The only way to increase the acreage goal on the Mekan system is to take acres from some other fishery area - akin to robbing Peter to pay Paul.

Mr. Heding:

2. Consideration should be given to dredging the spring pond in the south half of the SW 1/4 of section 28, T18N-R9E, Township of Richford, Waushara County. The spring pond is known as Semrow Springs.

DNR RESPONSE: A possibility, but it is questionable what the results will be. It is conjectural if dredging will improve water quality of downstream receiving waters of Wedde Creek, or if it will significantly increase production of naturally reproduced trout.

Mr. Heding:

3. Acquisition should be the major objective in the next five years. Development can be carried out after all lands have been acquired. Some limited maintenance of stream bank vegetation may be necessary to prevent stream bank erosion.

DNR RESPONSE: Agreed. Acquisition is the major goal at this time. Development and maintenance activities are pursued as funds are made available. There is a growing need for development and maintenance activities on state-owned land. The Department is being criticized for not taking care of lands already owned.

Mr. Heding:

4. Consideration should be given to management of Zinke Lake and the Mekan Springs for trout and bass. The carp and northern pike populations would have to be removed.

DNR RESPONSE: The Department is not sure how this can be accomplished or if there is any reasonable assurance of any lasting benefits.

Mr. Heding:

Overall the Master plan is well prepared and was well presented. We support the Department in its objectives and nothing should deter the goals of acquiring the needed lands to protect the greatest natural resource in this state. These springs and naturally reproducing trout streams cannot be replaced and if polluted or developed may be destroyed for all time.

Ryan Hagen, Menasha, Wis.

I heard that the public hearing on the Mekan River Master Plan did not go so well. This concerns me.

As a citizen of Wisconsin interested in the perpetuation of critical resources, I am very much interested in seeing that acquisition of lands surrounding the Mekan River be continued, and perhaps stepped up a bit.

I believe that:

- cold water resources, such as the Mekan, are a delicate sort of resource that can easily and irrevocably be destroyed by misuse of its waters and surrounding lands.
- the perpetuation of our diminishing cold water resources is in the best interest of the public, whether it is directly or indirectly beneficial to them.

- individuals, who privately control the resource, can not be trusted to act in the best interest of the public.
- it is, therefore, in the public's best interest to have cold water resources controlled by a public protective agency such as the DNR.

Since the Mekan River is such an important cold water resource to the public of Wisconsin, I think I speak for the public when I say that it is imperative that the Mekan River Master Plan continue.

Incidentally, I do trout fish on the Mekan River several times a year, and am therefore directly interested in seeing the Master Plan successfully completed. I am, however, not so interested in the access I would gain to its waters as I am in seeing that the trout resource is protected and enhanced. I have full faith and confidence that the Bureau of Fish Management will act favorably as far as my interests are concerned.

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FINAL DRAFT
JANUARY 1983

DRAFT

Extension Bulletin

THE EFFECT OF PUBLIC LAND
ON PROPERTY TAXES

by

Richard Barrows

Monroe Rosner*

* Richard Barrows is Professor, Department of Agricultural Economics, University of Wisconsin-Madison and Natural Resource Economist, University of Wisconsin-Extension. Monroe Rosner is Director, Bureau of Local Fiscal Policy, Wisconsin Department of Revenue.

The authors would like to thank Bill Loomer, Duncan Harkin and Marv Johnson for comments on a draft of the manuscript. Rick Olin and Phil Bradbury helped in developing some of the information on public land programs and tax impacts.

The Effect of Public Land on Property Taxes

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SUMMARY

Many people enjoy Wisconsin's public lands for hunting, fishing, camping, hiking, picnicking, and other recreational activities. Public land is also often used for forestry, which gives a big boost to many local economies.

But who pays for the public land? Many people fear that local people pay higher property taxes because public land is removed from the tax rolls and is not taxed. This decreases the local tax base, and many people feel that a lower tax base means higher tax rates and property taxes for local property owners.

Studies in many Wisconsin towns show public land has little effect on the property taxes of local people. When the amount of public land in a town is increased or decreased, property tax rates change very little.

In general, selling public land will not help keep property taxes down, and land purchases by public agencies do not usually increase property taxes of local property owners. (In fact when the Wisconsin Department of Natural Resources (DNR) buys land, the property taxes of local people decrease, at least in the first few years after the purchase.)

In making decisions about public land, local people and local elected officials should not worry too much about the effect of public land on property taxes. It is much more important to consider how public land will effect the local environment, the area's economy, and the type of community in which people want to live.

This bulletin is a summary of many studies of the effect of public land on property taxes. A series of studies in about 40 different towns in 1974-76 was reported in an extension bulletin published in 1976. Since

then there have been many changes in the laws about property taxes, school aids, other state aids to local governments and payments in-lieu of taxes on public lands. But these changes have only strengthened the conclusion of that 1976 bulletin--public land has little or no effect on the property taxes of local people. This bulletin summarizes a series of more recent studies, most of which were carried out since 1981. Also, the first section contains a summary of all the public land programs in Wisconsin, the only place such a summary exists.

INTRODUCTION

Wisconsin has nearly six million acres of public land and many people fear that public land in their area means higher property taxes for them.

Public land benefits people. Most of us enjoy our public parks for picnics, hiking, camping, swimming, or family outings. State or county forests provide land for hunting, snowmobiling, fishing and camping, and forestry gives a big boost to many local economies. Other public lands are used for fish and wildlife refuges or are set aside especially for fishing and hunting. These public lands benefit the people of the state.

But who pays for the public lands? Of course, when a state or federal agency buys land for public use, we all pay for the purchase through our state and federal taxes. But many people believe that local people pay even more, because they believe that public land means higher property taxes for local property owners. Public lands are not taxed and are removed from the tax rolls, which decreases the local tax base (total value of the property in the area). Many people believe that this loss of tax base means higher local property tax rates and property taxes for local property owners.

Counties with large amounts of public land do not have high property tax rates compared to the state average (Harkin). But, low tax rates may not be due to public land. Public land is concentrated in northern Wisconsin and property tax rates in the north are generally lower than other parts of the state. But this may be because governments spend less in these areas--there are fewer people, less development, and not as many services to provide. So, more research was needed to find out what effect public lands actually have on property taxes of local property owners.

In this report we'll look at what happens to property taxes when the amount of public land in a township (town) is increased or decreased.

In the first section, public land programs in Wisconsin are described; the Forest Crop and Woodland Tax laws are also described there. The second section describes the Wisconsin property tax system and the third section points out the general effect of public lands on local taxes. The fourth section reviews several studies of property taxes and public lands in Wisconsin towns. Section four also includes a discussion of programs that exempt privately-owned land from property taxes, such as the Woodland Tax or Forest Crop programs. The final section discusses the meaning of the studies for public policy decisions on public land programs.

PUBLIC LAND IN WISCONSIN

The Original Public Domain

The federal government once owned almost all of Wisconsin. Federal land sales began in 1834, but in the early years the pace was slow because much of the state's land had not been surveyed. After a large area was surveyed, land would typically be offered for sale at a public auction at a minimum bid of \$1.25 per acre. Land remaining after the auction could be obtained at the minimum bid price. The land in central Madison was acquired by James Doty in this way. Another important way to get land was through "squatter's rights"--settling the land and thereby earning the right to buy it at \$1.25 per acre. In this way, Solomon Juneau and his brother acquired nearly 300 acres at the mouth of the Milwaukee River, now downtown Milwaukee. After becoming a state in 1848, Wisconsin received over 10 million acres of federal land, nearly one-third of the 36 million acres within the state's borders. About half of this land was eventually awarded to railroad, canal and other contractors to allow them to finance their construction activity. Over 2 million acres were used for support of local public schools including Section 16 in every survey township as provided in the Northwest Ordinance of 1787. Other lands were used to help finance roads, education and other public activities.

Forestry and the "Second Public Domain"

Settlement of the prairie created a demand for lumber and much of it was supplied from Wisconsin. By 1900 much of Wisconsin's pine forests were gone, and there was little reforestation of the cutover land. To ensure a future supply of wood, the 1903 Legislature created a state department of forestry and directed it to establish a state forest reserve. By 1915 the

state forest reserve totaled 365,000 acres, much of it in the counties of Vilas, Iron, Oneida, Price and Forest.

In the early 1900's most people assumed, or hoped, that the cutover lands would eventually be used for farming. Reforestation and the 50-100 year wait for timber harvest was not an attractive option for many owners. Although many attempts to farm cutover lands failed, the few successful farms kept alive the hope that the land would eventually be converted to farms. In the years prior to 1920 property taxes on cutover land had been steadily increasing but the growing tax burden was offset by the hope of profits when the land could be farmed.

The agricultural depression of the 1920's dashed any hope of replacing forest with farms in northern Wisconsin. The market for cutover land weakened and finally collapsed. Owners abandoned millions of acres rather than pay the property taxes. The tax-delinquent lands were offered for sale at public auction, but there were fewer and fewer buyers. In 17 northern counties in 1921, one million acres was offered at tax delinquent auctions and 60% was purchased by private individuals. In 1927, about 2.6 million acres were offered at the tax sale but bids were received for only 18% of this acreage. A year later payment had been received for only 12% of the land sold in 1927. Benjamin Hibbard observed in 1928 that "large acres of land in northern Wisconsin have little present market value for any purpose".*

In this environment, in 1924 to 1932, many public land programs were established including the county forests, the state forests, the authorization for the national forests in Wisconsin, and the private Forest Crop Law.

*B. H. Hibbard, et al., "Tax Delinquency in Northern Wisconsin", Agricultural Experiment Station Bulletin 339, Madison, June, 1928.

Public Land Programs

About 5.9 million acres in Wisconsin are in public ownership and about another 1.7 million acres are privately-owned but pay no property tax. However, for 90% of this land some payment is made to local governments in place of (in lieu of) the property tax. The acreage and in-lieu payments for various public land programs are given in Table 1 and are discussed briefly below.

County Forests. The county forests were largely created from tax delinquent cutover lands which owners abandoned in the 1920's. Nearly 2.3 million acres are now included in county forests, the largest public land program in Wisconsin. Twenty-eight counties have county forests ranging in size from 6,741 acres in Monroe County to 266,474 acres in Douglas county (see Table 2). County forest covers 25% of Marinette County, 30% of Douglas County and 34% of Iron County. Both town and county governments derive revenue from the county forests. Towns receive a state aid each year of 20 cents per acre, plus 10% of average per acre receipts from timber sales. Counties receive an annual interest-free loan from the state to help operate their county forest program; counties decide on the amount of the loan, from zero to 50 cents per acre in 10 cent intervals. As timber is cut, 20% of gross receipts goes to the state for repayment of the loan to the county, 10% is divided among the towns and 70% is kept by the county. Timber revenue from the county forests has been increasing in recent years; in 1981-82, gross receipts exceeded \$3.8 million, equal to about \$1.68 per acre. Thus, towns received an average 32.4 cents per acre from the county forests--20 cents from the state plus 12.4 cents from timber sales. Average county proceeds were about 97 cents per acre in 1982.

TABLE 1

1982 ACREAGE AND PAYMENTS ON PUBLIC LAND AND
OTHER TAX EXEMPT LAND IN WISCONSIN

<u>Land Ownership Category</u>	<u>Acreage</u>	<u>Payments in Lieu of Taxes</u>	<u>Average per Acre in-Lieu Payment</u>
<u>U.S. Government</u>			
National Forests	1,501,910	\$ 961,174	\$0.64
National Wildlife Refuges	122,370	183,872	1.50
National Park Service	58,360	85,500	1.47
Corps of Engineers	40,320	59,000	1.46
Military Installations	60,500	36,845	.61
Indian Reservations	409,160	---	---
<u>State of Wisconsin</u>			
Dept. of Natural Resources	1,096,449	1,005,269	.92
Trust Lands	88,500	---	---
<u>County and Local Government</u>			
County Forest System	2,282,116	\$2,840,227	\$1.24
Community Forests	70,500*	---	---
Local Parks, Forests and Miscellaneous Public Lands	150,000*	---	---
<u>Private, Tax Exempt</u>			
Forest Crop Law	1,370,619	489,673	.37
Woodland Tax Law	330,977	112,598	.39
Miscellaneous, Including Scouts, Church, YMCA, etc.	10,000*	---	---
TOTAL	7,600,000	\$5,774,258	.76

Note: For explanation of individual payment programs, see the text.
Acreage (col. 1) is the most recent figure available and generally refers to 1982. Under most payment programs, payments (col. 2) are related to acreage in the prior year. For payment programs in which acreage changed significantly between 1981 and 1982, the average per acre payment (col. 3) is computed using the 1981 acreage figure which generated the payment.

*Estimated, no data available.

SOURCE: Based on information from the respective agencies, see text.

TABLE 2
WISCONSIN'S COUNTY FOREST SYSTEM, 1982

<u>County</u>	<u>County Forest Acreage</u>	<u>Timber Sale Receipts</u>	<u>Timber Sale Receipts Per Acre</u>
Ashland	31,995	\$ 114,648	\$3.58
Barron	14,360	20,983	1.46
Bayfield	166,256	300,629	1.81
Burnett	103,438	284,063	2.75
Chippewa	32,103	42,093	1.31
Clark	132,970	203,481	1.53
Douglas	266,474	198,233	.74
Eau Claire	50,732	41,130	.81
Florence	36,301	212,866	5.86
Forest	10,846	77,432	7.14
Iron	171,727	227,200	1.32
Jackson	104,524	43,918	.42
Juneau	13,939	21,620	1.55
Langlade	122,497	217,368	1.77
Lincoln	98,536	143,168	1.45
Marathon	24,603	21,827	.89
Marinette	227,590	670,723	2.95
Monroe	6,741	360	.05
Oconto	41,763	158,403	3.79
Oneida	81,281	96,876	1.22
Polk	15,798	24,728	1.57
Price	86,646	52,728	.61
Rusk	86,721	131,804	1.52
Sawyer	113,314	147,835	1.30
Taylor	17,391	26,485	1.52
Vilas	37,666	181,357	4.81
Washburn	148,213	142,313	.96
Wood	37,675	35,950	.95
Total	2,282,100	\$3,840,221	\$1.68

Notes: County forest acreage as of June 30, 1982; timber sale receipts apply to period July 1, 1981 to June 30, 1982.

From timber sales receipts, 20% is paid to the state, 10% is shared with the towns and the remaining 70% is retained by the county. Towns also receive an aid of 20¢ per acre of County Forest from the state. Counties receive a loan from the state, repaid by the 20% of receipts. The loan amount had been 10¢ per acre, but since 1980 counties may elect the amount of the loan, from 0 to 50¢ per acre in 10¢ increments.

The figure shown in Table 1 as the payment in lieu of taxes on County Forests corresponds to the sum of town and county proceeds from the County Forest.

SOURCE: Wisconsin Department of Natural Resources.

State Lands. The Wisconsin Department of Natural Resources (DNR) manages about 1.1 million acres of state parks, forests and fish and game area (see Table 3); total acreage has been increasing by about 14,000 acres per year. Much of the DNR acreage is in the Northern Highland and American Legion State Forests or is a part of the state's wildlife management program.

The DNR in-lieu payment to local government depends on when the lands were acquired. For the roughly 900,000 acres acquired prior to July 1, 1969, a flat rate of 50 cents per acre is paid to the town government each year. For land acquired since that date the payment in the first year after acquisition is equal to the full property tax (excluding the state tax) which would have been collected if the property were still on the tax rolls. In the next year the payment is 90% of that amount, then 80%, and so on, declining to the 10% level, or 50 cents per acre, whichever is greater. Payments in all later years are made at this same level. The entire payment goes to the town government.

In 1982, DNR payments in lieu of taxes amounted to \$1,005,269, an average of 92 cents per acre. For the 178,851 acres acquired between July 1, 1969 and January 1, 1981 the payment averaged \$3.11 per acre.

TABLE 3

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ACREAGE BY MANAGEMENT CATEGORY, JULY 1, 1982

Fish Management	73,495
Wildlife Management	455,845*
Northern Forests	428,734
Southern Forests	47,227
Parks	72,515
Scientific Areas	5,041
Wild Rivers	6,433
Other	<u>7,156**</u>

* Includes 57,505 acres leased from U. S. Fish and Wildlife Service.

** Includes administrative areas, youth camps and other properties not open for public use.

SOURCE: Wisconsin Department of Natural Resources

Federal Lands. Most federal lands in Wisconsin are in the national forest system although in recent years the National Park Service (NPS) and the Fish and Wildlife Service (FWS) have been increasing their land holdings.

The 1925 state legislature authorized the federal government to establish national forests in Wisconsin. Today the Nicolet and Chequamegon forests include nearly 1.5 million acres in eleven northern counties. Two separate payments in lieu of taxes are made for national forest lands, one for towns and one for counties (see Table 4). Towns receive 25% of gross receipts from the national forest, in proportion to the acreage of the forest that is in the particular town. In 1982, towns with lands in the Nicolet Forest received 49 cents per acre as their share of receipts; towns with lands in the Chequamegon Forest received 22 cents per acre. The in-lieu-of-tax payment to counties was enacted by Congress in October, 1976. The county receives 75 cents per acre of "entitlement land", defined as federal lands which were not owned by state or local governments when the federal government acquired them. In Wisconsin, about 80% of national forest acreage is entitlement land. This payment is then reduced by the total payment to the towns in the preceding year, but the county always receives at least 10 cents per acre of entitlement land. In 1982, counties in the Nicolet Forest received an average payment of 27 cents per acre, and counties in the Chequamegon Forest received an average of 32 cents per acre.

The National Park Service is in process of developing two Recreation Areas in Wisconsin. The Apostle Island National Lakeshore consists of about 42,000 acres including 21 of the 22 islands in the Apostle Island group and land on the Bayfield peninsula. Acquisitions are nearly completed in this project. About 17,000

TABLE 4
NATIONAL FOREST PAYMENTS IN WISCONSIN, 1982

	<u>Nicolet National Forest</u>	<u>Chequamagon National Forest</u>	<u>Total</u>
Acreage in Forest	654,938 acres	846,972 acres	1,501,910 acres
25% of Gross Receipts			
Payments to Towns:			
Total Payment	\$323,242	\$189,338	\$512,580
Per Acre Payment	49¢	22¢	34¢
Payment to Counties for			
Entitlement Lands:			
Total Payment	\$173,704	\$274,980	\$448,684
Per Acre Payment	27¢	32¢	30¢
Total Payments in 1982	\$496,946	\$464,318	\$961,264
Average per Acre Payment			
to Towns and Counties	76¢	55¢	64¢

Source: Based on data from the U.S. Forest Service, U.S. Department of Agriculture and Division of Finance, Bureau of Land Management, U.S. Department of the Interior.

acres was donated by the state of Wisconsin. The St. Croix National Scenic Riverway covers about 225 miles on the St. Croix and Namekagon Rivers. Acquisitions in Wisconsin as of late 1982 amounted to 16,400 acres in fee plus easements on another 7,100 acres.

In 1977, the federal government began making payments in lieu of taxes on National Park Service lands. A payment equal to 1% of the fair market value of the land and improvements at the time of federal purchase (but not to exceed the property tax last collected) is made each year during the first five years after acquisition. This payment is distributed to town, county, and school district according to their respective shares of the last property tax collected. Also, each year the county receives 75 cents per acre of "entitlement land". (The 17,000 acres in the Apostle Islands which the State of Wisconsin donated to the federal government does not qualify as entitlement land). In 1982, NPS payments to local governments totaled \$85,500. About \$26,200 of the total was paid to the counties for roughly 38,000 acres of entitlement land. The balance, about \$59,300 representing the 1% of fair market value payment was divided between town, county and school district based on respective shares of property tax collections. For all National Park Service land in Wisconsin, 1982 payments averaged \$1.47 per acre.

The U.S. Fish and Wildlife Service (FWS) owns and manages 122,370 acres in Wisconsin, nearly all of it in four National Wildlife Refuges—Upper Mississippi River, Trempealeau, Horicon and Necedah. Payments in lieu of taxes on FWS lands are governed by the Refuge Revenue Sharing Act of 1935, as amended in 1978. Under current law, the payment is the greatest of: (1) 75 cents per acre; (2) three-fourths of 1% of the fair market value of the property; or (3) 25% of the net receipts from the

land. Payments are shared among the town, county and school district in proportion to their property tax collections. Almost all payments are based on the second alternative--three-fourths of 1% of fair market value. The per acre payment averaged \$1.50 in 1982. FWS also owns 57,000 acres which are leased to the DNR--payments for these lands are made by the DNR at the rate of 50 cents per acre.

Other Public Lands. Wisconsin has several other types of public lands. Nearly 90,000 acres remain of the State Trust Lands created at statehood for support of education. Most of this land is in Forest, Iron, Oneida, Price and Vilas counties and will be eventually sold to government agencies to "block-in" public forests and recreation areas. The federal Fort McCoy occupies about 60,500 acres in Monroe County and pays the county 75 cents per acre on about 54,000 acres of "entitlement land". The U.S. Army Corps of Engineers owns about 40,000 acres, mostly along the Mississippi River in Buffalo, Grant, LaCrosse and Vernon counties. Counties receive 75 cents per acre for about 37,214 acres of "entitlement land". Finally, local parks and community forests are a very important, intensively-used type of public land. There are 329 school forests covering about 24,000 acres and 43 city, village, and town forests containing about 20,000 acres. Counties own about 26,500 acres of community forest and also have substantial acreage not classified as either county or community forest. Some rural, northern towns also own large forest acreages, much of it acquired through tax delinquency.

Native American (Indian) lands are also tax-exempt. The 409,160 acres of reservation land in Wisconsin is held in trust by the federal government, either for individuals or tribal groups. About 238,000 acres are tribal trust lands and are controlled by tribal councils or other forms of government. Reservations range in size from the 220,234-acre Menominee

reservation comprising Menominee County to the 1,694 acre Mole Lake reservation in Forest County. Reservation lands may not be taxed and there is no in-lieu payment. However, most services on the reservations are provided by the federal government and federal grants are provided to local schools to offset the cost of educating reservation children.

Private, Tax-Exempt Lands

About 1.7 million acres of privately-owned land is exempt from property taxes in Wisconsin. Almost all of this land is in the private Forest Crop and Woodland Tax Laws.

Forest Crop Law. The private Forest Crop Law was adopted in 1927 to encourage private owners to hold their cutover lands and practice forestry. It was felt that high property taxes discouraged forestry investment because standing timber was taxed year after year. The Forest Crop Law provides for a constant annual payment in lieu of property tax, and then taxes the timber when it is harvested.

Under the Forest Crop Law an owner of a forest of 40 acres or more may sign a 25- or 50-year contract with the state. The owner agrees to promote sound forestry practices in return for special tax treatment. In lieu of general property taxes, the owner pays to the town treasurer an annual "acreage share" of 10 cents per acre for lands entered before December 31, 1971, or 20 cents per acre for lands entered after that date. This latter payment is recomputed every 10 years, based upon the change in real estate values over the preceding decade. For the period 1983-1992 the payment is 74¢ per acre. In addition, the owner pays a severance tax to the state of 10% of the value of the timber when cut. The state pays 20 cents per acre annually to the town treasurer as a no-interest loan, repaid by the 10% severance tax. If severance taxes exceed the state payments, the difference is returned to the town treasurer. If a contract ends and

is not renewed, the owner pays 10% of the value of the timber as if it had been cut. Of the local government's proceeds from the Forest Crop Law, the town treasurer gives 20% to the county and keeps 80% for the town.

As of January, 1982, there were 1,370,619 acres under the Forest Crop Law; over two-thirds of this acreage is accounted for by 12 industrial forest owners, mostly paper companies.

Woodland Tax Law. The Woodland Tax Law is for owners of woodlots of 10 to 40 acres. The law was enacted in 1954 and amended in 1976. Under the current law the woodlot owner may sign a 15-year contract with the state; a forest management plan, filed with the application, is a part of the contract. The owner pays 40 cents per acre to the town treasurer in lieu of general property taxes (20 cents per acre for land entered prior to 1977). The in-lieu payment for post-1977 entries is recomputed in the same way as the Forest Crop Law. For the 1983-1992 period it will be \$1.49 per acre. Unlike the Forest Crop Law there is no state payment to local government, nor is there a severance tax when timber is cut. If the owner fails to comply with the contract, or wants to withdraw his lands before the contract expires, a penalty is assessed.

The Woodland Tax Law is popular among property owners in the Southern part of the state. At the start of 1982, owners in about 1,000 towns in every county but Milwaukee had 331,000 acres enrolled under about 7,000 separate entries.

THE PROPERTY TAX SYSTEM

Several types of government in Wisconsin have the authority to tax property. These include municipalities (towns, villages and cities), counties, school districts, vocational education districts and the state.

In some areas, special purpose governments such as sanitary districts also tax property.

In rural areas the most important taxing jurisdictions are the school district, county, town, vocational district and the state. Table 5 shows that some of these jurisdictions tax property much more heavily than others. The school district takes the largest share by far, accounting for 65% of the total property tax collected in Wisconsin towns in 1980. The county tax accounts for 19% and the town tax for only 7%. Property taxes are levied by the various taxing jurisdictions but the town (municipality) has the responsibility of billing the property owners, collecting the taxes and distributing the proper amount to each of the taxing jurisdictions.

Calculating the Tax Bill

A tax bill is calculated for a rural property owner in two distinct steps. In Step 1 the tax levies of each taxing jurisdiction—school district, county, vocational district, others—are divided up among the municipalities (towns, villages, cities) in the jurisdiction. In Step 2 the combined tax levy, plus the municipality's tax levy, is distributed among the owners of taxable property in the municipality.

The Tax Bill for the Town. In Step 1, each taxing jurisdiction, such as a school district, calculates its tax levy. First, the jurisdiction calculates the amount of money needed to provide its services. Then it estimates the revenue it will receive from federal or state grants or aids, fees, operating receipts, fines, interest, or other sources of revenue. The difference between expenditures and these other sources of revenue is the amount of money that must be raised locally through the property tax. This amount is called the property tax levy.

The property tax levy of each taxing jurisdiction (such as a school district) is distributed among the various municipalities in the area

Table 5

PROPERTY TAXES IN WISCONSIN TOWNS,
Taxes levied in 1981, collected in 1982

	<u>Total</u>	<u>School District</u>	<u>County</u>	<u>Town</u>	<u>Vocational Education</u>	<u>State</u>
Tax Rate (Per \$1,000 of full value)	\$ 17.15*	\$ 11.16	\$ 3.31	\$ 1.27	\$ 1.21	\$.20
Amount (Millions)	\$782.6	\$509.3	\$151.2	\$57.9	\$55.1	\$9.1
Percent of Total	100%	65%	19%	7%	7%	1%

* General property tax relief (tax credits) to property owners in towns reduced the total tax rate by \$1.25 per \$1,000 of full value, resulting in an "effective" tax rate to \$15.90 per \$1,000 of full value.

SOURCE: Wisconsin Department of Revenue.

according to equalized value, also called full value. For example, if a town contains 15% of the school district's equalized value, then the town must raise 15% of the school district's tax levy. Equalized value is the full market value of all property in the town, village, or city. Total value of property is also called the tax base. Full value of property in each municipality (and taxing jurisdiction) is determined annually by the Wisconsin Department of Revenue from market sales, appraisals, and other sources of information. Full value is determined for the municipality as a whole, and for major categories of property within the municipality, such as residential and agricultural, but full value is not estimated for each specific parcel.

Within the town, the total tax the town treasurer must collect is distributed among property owners according to assessed value. If the assessed value of an individual's property is 2% of the town's total assessed value, he must pay 2% of the property taxes raised in the town. Assessed value of each parcel in the town is determined by the local assessor. The local assessor may assess property at some percentage of full market value. The ratio of assessed value to equalized (full) value is called the "assessment ratio". For example, if the assessment ratio is 26%, a farm whose full market value is \$100,000 would be assessed at only \$26,000. The assessment ratio varies greatly among municipalities. However, since assessed value is only meaningful within the municipality, it does not matter if each local assessor assesses property at a different percentage of full value. However, within the town it is important that each property be assessed at the same percentage of its market value. Otherwise some owners will pay more, and others will pay less than their fair share of the property tax.

So, equalized value is used to distribute school, county, and other property tax levies among municipalities (town, village, city). Assessed value is used to distribute these levies, and the municipal levy itself, among property owners within each municipality. All of these distributions are done by the tax rate, which is simply a convenient way to calculate tax bills and distribute the tax in proportion to property value.

We know that a town's share of the county tax levy is the same as its share of the county's equalized valuation. So the town's share is:

$$\frac{\text{town equalized valuation}}{\text{county equalized valuation}}$$

This ratio, multiplied by the county tax levy, would give the amount of tax that the town treasurer must collect and send to the county:

$$\frac{\text{town full value}}{\text{county full value}} \times \text{county tax levy.}$$

In practice, however, the allocation is made by first calculating a full value tax rate for the county, which is:

$$\text{county full value tax rate} = \frac{\text{county tax levy}}{\text{county equalized (full) value}}.$$

This county tax rate, multiplied by the town's full value is the amount of tax that must be raised from town property owners and paid to the county. This is the mathematical equivalent of the county levy multiplied by the ratio of town to county equalized valuation. Tax levies of the school district and vocational education district are allocated in a similar fashion.

The Tax Bill for the Owner. In Step 2, the total tax to be raised in the town is allocated among the owners of taxable property. A tax rate based on assessed value is used for this allocation. Taxes allocated to the town by the school, county, vocational education district, state and

special purpose districts are combined with the tax which the town levies for its own purposes. The sum is the total tax levy which the town must collect. The collection is done by first calculating an assessed value tax rate:

$$\text{assessed value tax rate} = \frac{\text{total tax levy of town}}{\text{town assessed valuation}}$$

Often a local assessed value tax rate may be calculated for each of the taxing jurisdictions. For example:

$$\frac{\text{town's share of county levy}}{\text{assessed value in town}} = \frac{\text{local assessed value}}{\text{tax rate for county}}$$

For the individual property owner in the town, the amount of county tax he must pay is the local assessed value tax rate for county times the assessed value of his property. Repeating this calculation for the school district, vocational educational district, town, state and other special tax levies will give the individual's tax bill for these jurisdictions. The total is reduced by a state tax credit, and the property owner pays the rest to the town treasurer.

Full Value vs. Assessed Value Tax Rates

A full value tax rate can always be translated into a local assessed value tax rate using the assessment ratio. For example, suppose the full value tax rate for the county is \$5.00 per \$1,000 full value. Suppose that in a certain town in the county the assessment ratio is 50% (assessed value is one-half of full value). Then in that town, the local assessed value tax rate for the county would be \$10.00 per \$1,000 assessed value. If an individual has a home with a full market value of \$30,000, and an assessment of \$15,000 (50% of full value), then his county tax is:

$$\begin{array}{lcl} \text{local assessed value} & \times & \text{assessed value} \\ \text{tax rate for county} & \text{of home} & \\ \$10.00 \text{ per } \$1,000 & \times \$15,000 & = \$150.00 \end{array} = \text{individual's county tax}$$

His tax bill could also be calculated using full values:

$$\begin{array}{rcl} \text{Full value tax rate} & \times & \text{estimated full} \\ \text{for county} & & \text{value of home} & = & \text{individual's} \\ & & & & \text{county tax} \\ \\ \$5.00 \text{ per } \$1,000 & \times & \$30,000 & = & \$150.00 \end{array}$$

So a local assessed value tax rate can always be translated into a full value tax rate and vice versa. In this paper, we will always use full values, and full value tax rates to avoid the confusion of having to take account of different assessment ratios in each town.

PUBLIC LAND AND PROPERTY TAXES

The property tax system in Wisconsin is complex and involves taxing decisions of several different units of government. In order to understand how public land affects property taxes, it is necessary to take a detailed look at how each of these units sets its tax rate.

The School District

In general, a rural school district will contain all or part of several towns and villages. School district boundaries often do not follow town or county lines. The school district's tax levy is the difference between estimated expenditures and nontax revenues such as state school aids, federal grants or other revenue. So, the school tax rate is set by this formula:

$$\text{School Tax Rate} = \frac{\text{School Costs minus Aids and Other Revenue}}{\text{Total Property Value in the District}}$$

The school tax rate is school costs minus state aids and other revenue, divided by the tax base.

Many people believe that if the school district's tax base goes down, it's tax rate will go up. In practice this does not happen very often. When the tax base goes down, general school aids from the state go up, and offset most (or all) of the loss in tax base. For example, if the state or

county buys land in a town both the town's tax base and school district's tax base decline. So, state school aids increase. Extra school aids make up for all, or almost all, of the school tax revenue lost because of the public land. So, the extra public land does not change the school tax rate. The only exceptions to this rule are the 36 school districts, out of a total of 433 districts in the state, which do not receive general school aids. Let's look at this effect in greater detail.

The state shares in nearly all school costs (state average 97 percent) through general school aids. State law guarantees a certain property value behind each child to finance his or her education, so children in property-poor districts will have a chance for a well-financed education. This guaranteed property value was \$231,000 per pupil in 1981-82.¹ If a school district's valuation per pupil is 60 percent of the state guarantee, the district pays 60 percent of its shared costs, and the state pays the remaining 40 percent through general school aids. If the district's value is 10 percent of the guarantee, the district pays 10 percent and the state pays 90 percent of the shared school costs. In effect, if a district's per pupil value falls short of the state guarantee, the state pays the school tax on the amount of the shortfall.

If the amount of public land in the school district increases, the property valuation per pupil will decline. The district now has a lower percent of the state guaranteed value per pupil, so the district pays a

¹ This is for K-12 school districts. This guarantee applied only to "shared costs" up to \$2,253 per pupil. The guarantee for shared costs above \$2,253 was \$135,200 per pupil in K-12 school districts. Shared costs include operating costs (teacher salaries, supplies, etc.), capital outlays, and up to \$90 per pupil in debt repayment.

lower percent of its costs, with the increased state aid making up the difference. The extra state aid offsets the lost school taxes almost dollar-for-dollar, so the school tax rate changes very little, or not at all. This is extremely important because, as we saw in Table 5, the school tax accounts for 65% of the total tax in Wisconsin towns. In the very few school districts that receive no state school aids, increases in the amount of public land would not be offset by increased school aids so the school tax levy and tax rate would increase.

The County

The county tax is calculated like the school rate. The amount of money the county must raise locally through the property tax is the tax levy. The tax levy is the total county outlay, less payments received from the state and other nontax revenues. (The state requires counties to provide certain services, and in many cases provides a payment to the county to fund the programs. State payments also include shared taxes and in-lieu payments for public land). The tax levy is divided by the total value of property (tax base) in the county, and the result is the tax rate:

$$\text{County Tax Rate} = \frac{\text{County Expenditures minus Nontax Revenue}}{\text{Total Value of Property in County}}$$

What happens to the county tax rate if there is an increase in the amount of public land (or other tax exempt land) in the county? First, the exemption means that land is removed from the tax roll, so the taxable valuation of the affected town will decline, and the county's valuation will decline by a similar amount. But the county tax base is quite large to begin with so even a sizeable change in the tax base of a particular town will not have a significant effect on the county's tax base.

For example, the 1981 average county tax base (excluding Milwaukee county) is about \$2.6 billion, whereas the average town tax base is about

\$30 million, a ratio of over 85 to one. If more public land reduced the average town's tax base by 10% or \$3 million, the average county tax base would decline by only .2% (one-fifth of 1%). If the county received no compensating payments, its tax rate would increase by about 0.6 cents per \$1,000 of full value, from \$3.31 to less than \$3.32 per \$1,000 full value for the average county (Table 5). The effect of the tax base change is "diluted" by the large size of the county's tax base. In the process, the loss in county taxes is spread broadly and equally over all taxpayers in the county. But even this small change may not occur since counties receive in-lieu-of-tax payments for certain categories of public land and other tax-exempt land. Finally, even if the county rate does increase slightly, part of the increase may be offset by increased state shared taxes, discussed below.

The Town

Towns govern all land not in cities or villages. Most public land is in rural areas and will affect the town's tax base. The town tax levy is the amount of money to be spent by the town government, less any state aids, shared taxes, federal revenue sharing, in-lieu payments, highway aids and other non-tax revenue. For most towns, these state (or federal) payments are large enough to finance most of the town government's spending. In fact, in about one-eighth of all Wisconsin towns in 1981, these payments met all of the town's expenses, so these towns levied no property taxes at all.

The town tax rate is:

$$\text{Town Tax Rate} = \frac{\text{Expenditures minus State and Federal Payments and Other nontax Revenue}}{\text{Total Value of Property in Town}}$$

Public land could affect the town's tax rate in several ways. First, the town's tax base will be decreased and this will mean that the town may

receive increased shared revenue and tax credit payments from state and revenue sharing payments from the federal government. Second, the town will usually receive payments in place of property taxes from the public agency which acquires the land. This revenue is called "payments in-lieu of property taxes," or simply "in-lieu payments." On about 90% of public land or tax-exempt land some form of in-lieu payment is provided to local government. For example, the town receives at least 40 cents for each acre of Woodland Tax Law land, at least 50 cents for each acre of DNR land and a share of timber sale revenue from the National Forest (see Table 1). These in-lieu payments are often more than enough to make up for any tax revenues the town might lose because of the public land.

For example, in 1981 the state average equalized valuation of an acre of forest land was about \$370. The average town tax rate was \$1.27 per \$1,000 full value, so the average town receives about 47 cents in property tax from an acre of forest land. If the town receives more as in-lieu payments than it loses in property taxes, it could use the excess to offset any increases in the county or school tax rates, or could simply use the surplus to reduce taxes in general. The final result of the public land could be (and often is) lower taxes for local citizens, depending on the town.

Several factors influence the effect of public land on town tax rates: (1) the size of the town property tax levy; (2) the size of the town's tax base; (3) the amount of the in-lieu payment. The examples in the next chapter will show how these factors influence the effect of public land on town tax rates.

Vocational, Technical and Adult Education District

The state's 16 Vocational-Technical and Adult Education (VTAE) districts also tax property. The VTAE tax rate is calculated in the same

way as for the town or school district:

$$\text{VTAE Tax Rate} = \frac{\text{Expenditures minus Aids, Fees and other charges}}{\text{Total Value of Property}}$$

The average VTAE tax rate is quite low - about \$1.30 per \$1,000 valuation. In addition, all VTAE districts contain several counties or parts of counties, and the tax base of the districts is extremely large. As a result, an increase in public land in one town, or several towns, will have no measurable effect on the VTAE tax rate. Also, state aids to the VTAE district increase as its tax base declines, similar to state school aids. For these reasons, the VTAE tax rate is not included in any of the following discussion.

State

The state also taxes property, but the state tax rate is set by law at 20 cents per \$1,000 valuation. Changes in the amount of public land, or tax base, in a town will have absolutely no effect on the state tax rate. The state property tax rate is also excluded from the remaining discussion.

Shared Revenues and Tax Credits

The impact of public land on local property taxes is also affected by state shared revenues and state property tax relief. Payments under both of these programs may change if the amount of public land in a town is increased or decreased.

Over three-quarters of the funds paid to municipalities and counties under the state shared revenues program is distributed through a formula called "aidable revenues." Under this formula, payments increase if a jurisdiction's equalized property value per person decreases, or if its locally raised revenue increases. (Of course, from year to year most jurisdictions might have increases in value per person so the key is how much value per capita rises compared to other jurisdictions.) Thus, if

public lands are returned to the tax rolls, the state payment for "aidable revenues" may be lower than it would have been otherwise. Similarly, if land is removed from the tax rolls for a public land program, the state payment under the "aidable revenues" formula will be higher than if the land had remained in private ownership. Thus, the state shared revenues program, specifically the "aidable revenues" part, partially offsets the loss of property tax revenue when land is removed from the tax rolls.

A second state payment is provided directly to property owners as a credit on property tax bills. During 1982-84, the formulas for distributing these payments are being revised. But under both the old formula and the new formula state payments will increase if local tax base is reduced to public or tax exempt lands, or the payments will decline if these types of lands are returned to the tax rolls.

Up to 1982, the amount of tax credits paid to property owners was based on the total tax in their municipality. So taxpayers in a town with high tax rates received more tax credits than taxpayers in towns with low tax rates. If more public land leads to a higher total tax rate in a town, the state paid more tax credits to property owners. These extra credits offset part of the tax rate increase.

Beginning in 1984, property tax credits will be based on school levies and school aids. Under the school levy part of the program credits are distributed to municipalities in proportion to total school levies. Thus, if public land increases school levies, credits under this part of the program will increase. Under the school aid part of the program, credits are calculated using the general school aid formula. If public land in a town reduces property values, credits under this part of the program will increase.

Thus, the loss of tax base (and tax revenue) due to public lands may be further offset by increased shared revenue payments to local government and increased property tax relief payments to individual property owners.

Tax Levy, Tax Rate

We've seen that property taxes in Wisconsin are levied by school districts, counties, towns, vocational education districts, the state, and special-purpose districts. Each taxing jurisdiction calculates its property tax levy by estimating its expenditures and subtracting the amount of state and federal payments and other nontax revenues it expects to receive. The tax rate is determined by dividing the tax levy by the total value of property in the jurisdiction--the tax base. For a given tax levy, a smaller tax base (less total value) means a higher tax rate.

Public land means a lower tax base, but it does not necessarily mean that tax rates will increase. When the amount of public land increases, the tax base of each taxing jurisdiction decreases. But when the tax base declines, the state provides more school aids to the school district, more shared revenues to the town and county, more tax relief to taxpayers, and more aids to the VTAE district. Also, the public land agency may provide in-lieu payments to the town or county. These payments and aids reduce the amount of money each taxing jurisdiction must raise through the property tax. So public land means both a lower tax base and a lower tax levy. Public land may cause tax rates to go up or down, depending on the specific local situation. What usually happens in Wisconsin? The next section will review several studies of the effect of public land on the property taxes of local citizens.

PUBLIC LANDS AND PROPERTY TAXES: EXAMPLES FROM WISCONSIN TOWNS

Over the past few years, various towns and counties have requested studies of the effects of public land on local property taxpayers. Studies were requested in several counties--Barron, Burnett, Crawford, Douglas, Eau Claire, Florence, Iowa, Iron, Lincoln, Marinette, Pepin, Richland, Sawyer, Vilas, Washburn and others. Other studies were completed in Bayfield, Door, Florence, Langlade, and Wood Counties. Most of these studies concerned lands held by public agencies, and the effect of these lands on property taxes. Some of these studies involved privately-owned land which is exempt from property taxes, such as land in the Woodland Tax or Forest Crop programs. Both public and tax-exempt private land will be discussed in the examples in this chapter, because both types of land pay no property taxes, and the effect on local taxpayers is similar. In all cases, we either assumed or knew for certain that public service costs did not change with a change in the amount of public or other tax-exempt land. More detailed discussions of all the examples can be found in the references in the back of this bulletin. Other recent research on public lands and taxes is also included in the reference section.

County Forests

What would happen to property taxes of local people if land were withdrawn from the county forests, sold, and returned to the tax rolls? This question has been asked by citizens and elected officials in several Wisconsin counties. Studies to determine the answer have been carried out in Burnett, Douglas, Eau Claire, Iron, Juneau, Lincoln, Marathon, and Marinette counties. The results from a few of those studies will be summarized.

Eau Claire County. We assumed that 640 acres of county forest in each of six towns were sold to private owners in 1980. The six towns were

Bridge Creek, Fairchild, Lincoln, Luddington, Seymour and Wilson. A total of 3,840 acres would be returned to the tax rolls in Eau Claire County. It was assumed that the land would be valued on the 1981 tax rolls at \$430 per acre, the average full value for an acre of taxable forest land (Class F1) in 1981 in Eau Claire county. So, sale of the 3,840 acres of forest land would add \$1,651,200 to the county's 1981 tax base. About \$275,200 would be added to the 1981 tax base in each town. What would happen to the taxes of local people?

School tax rates would not change very much. The forest land on the tax rolls would produce extra tax revenue, but the school districts would lose state school aids because when the district's tax base per pupil increases, state aids decline. The net result would be small changes in the school tax rate.

<u>School District</u>	<u>Gain in Tax Revenue</u>	<u>Loss in Aids</u>	<u>Tax Rates (per \$1,000 Full Value)</u>		
			<u>Before Sale</u>	<u>After Sale</u>	<u>Change</u>
Augusta (T. Bridge Creek, Wilson)	\$6,983	\$4,386	\$12.72	\$12.69	-3.0c
Fall Creek (T. Lincoln, Luddington, Seymour)	10,153	6,119	12.35	12.30	-5.7c
Osseo-Fairchild (T. Fairchild)	3,181	2,091	11.57	11.56	-0.9c

For county taxes, if the County Forest Land had been on the tax rolls in 1981, it would have produced about \$6,007 in county tax revenue. The county would have lost \$1,425 in timber sales revenue (if the land were producing revenue at the average for all Eau Claire County forest land) but the costs of operating the county forest program may have been reduced somewhat as well. It was assumed that the loss of timber sale revenue was offset by lower operating costs, so the county would gain the property tax

revenue with no losses. However, because the county's tax base is large, nearly \$1.5 billion in 1981, the tax rate would decrease only about two-fifths of one cent and so would remain at \$3.64 per \$1,000 full value. If the entire proceeds from the sale (\$1,651,200 less \$6,835 loan repayment to the state) were invested at 10% and the annual yield of \$164,436 were used to reduce the county's tax levy, the county tax rate would decline by 11¢ per \$1,000 full value.

Town taxes, for town government purposes, would be affected more strongly. Each town would lose the 20 cents per acre payment from the state, plus an average of 8 cents per acre for the town's share of timber sale revenues (Table 2). In addition, state shared revenue payments to some of the towns would decline in response to the towns' higher per capita valuations. On the other hand, if the land were on the tax rolls, it would produce from 19 cents per acre in town taxes in Wilson to about 59 cents per acre in Bridge Creek. These aid payment losses and tax revenue gains are shown in the Table below for each of the 6 towns; the change in the town's tax rate is also shown.

<u>Town</u>	<u>Town Taxes</u>					
	<u>Tax Revenue Gain</u>	<u>Aid Loss</u>		<u>Town Tax Rates (per \$1,000 Full Value)</u>		
		<u>State Shared Revenues</u>	<u>In-lieu Payment</u>	<u>Before Sale</u>	<u>After Sale</u>	<u>Change</u>
Bridge Creek	\$375	\$533	\$179	\$1.356	\$1.364	+0.9¢
Fairchild	290	363	179	1.022	1.056	+3.4
Lincoln	293	0	179	1.069	1.065	-0.4
Luddington	247	332	179	.884	.899	+1.5
Seymour	273	0	179	.995	.992	-0.3
Wilson	123	0	179	.441	.446	+0.5

The total tax rate change is the sum of the change in the school, county and town tax rates, plus any resultant change in state tax credits. For example if the tax rates for school, county and town decline then state tax credits to individual taxpayers would also decline, increasing slightly the effective tax rate for the property owner. Overall, selling an entire section (640 acres) of county forest in each of six towns would not have changed people's tax bills very much. Since the gains from the increased tax base are offset by loss of school aids, county forest aids, timber sale revenue and state shared revenues and tax credits.

Total Change

<u>Town</u>	Change in Total Tax Rate, including effect of tax credits (per \$1,000 full value)	<u>For Owner of a \$50,000 home</u>		<u>For Owner of a \$200,000 Farm</u>	
		Actual 1981 Tax Bill	Change in Tax If County Forest Sold*	Actual 1981 Tax Bill	Change in Tax If County Forest Sold*
Bridge Creek	-2.2¢	\$862.70	-1.09	\$3,450.78	-\$ 4.37
Fairchild	+1.9¢	\$823.97	+ .96	\$3,295.86	+ 3.85
Lincoln	-6.2¢	\$843.10	-3.11	\$3,372.41	- 12.45
Luddington	-4.4¢	\$842.68	-2.20	\$3,370.73	- 8.82
Seymour	-6.4¢	\$859.77	-3.19	\$3,439.09	- 12.75
Wilson	-3.2¢	\$853.10	-1.62	\$3,412.41	- 6.49

*If the sale proceeds were invested at 10%, the tax of each homeowner would decline by an additional \$5.50 per year and the tax of each farm owner would decline by an additional \$22.00 per year.

Similar studies have been conducted in other counties, with similar results. In Iron County, Town of Oma, we found that a sale of a small block of county forest lands would change local property tax bills by less

than one-half of one percent. In Lincoln County, Town of Harrison, the sale of 3,000 acres of county forest land would actually have increased property tax bills for landowners because the loss of in-lieu payments, timber sale revenue and school aids would have more than offset the local tax revenue gains. In Marinette County the effect of selling county forest in the Town of Athelstane, would have decreased local tax bills less than one fourth of one percent. In Douglas County, a sale of county forest lands in the towns of Summit, Maple, Solon Springs and Wascott would have increased local tax bills in every case. In Marathon County a large sale of county forest land in the Towns of Guenther and Hewitt would have increased taxes very slightly for local people in both cases. Other studies have shown similar results.

The conclusion is that selling county forest land will not guarantee lower property taxes for local owners. Put differently, the county forests do not mean high property taxes for local residents. But yet if the county lands were on the tax rolls, more local property tax revenue would be collected. Who makes up for this revenue if the lands remain in public ownership? Much of it is made up by school aids and other payments from the state, paid for by taxpayers throughout Wisconsin. County forest lands do have a tax cost, but that cost is not borne by local people through their property taxes. The cost is borne by all Wisconsin residents.

DNR Land

The Wisconsin Department of Natural Resources (DNR) buys land for state parks and forests, hunting and fishing areas, wildlife refuges, the state wild rivers program and other public uses. Detailed studies of actual DNR purchases have been made in Burnett, Florence, Bayfield and Polk counties. Studies of the effect of hypothetical DNR purchases have been made in Barron, Door, Langlade, Marinette, Monroe, Rock and Sawyer

counties. The results are similar and the conclusion is clear. DNR land purchases do not mean higher property taxes for local people. In fact, DNR purchases lead to lower property taxes in the first few years after purchase and have very little effect after ten years or so. Recent examples from Florence and Polk Counties can illustrate these points.

The DNR has been purchasing land on the Pine and Popple Rivers in the towns of Commonwealth and Fern in Florence County as part of the state Wild River program. The effect on local property taxes of removing these lands from the tax rolls was studied in 1982.

The effect of the DNR lands on school, town and county tax rates was examined. The DNR purchases have no measurable effect on the tax rate of the Vocational-Technical and Adult Education (VTAE) district because of the VTAE's extremely large tax base. The state tax rate is set by law and will not change. So the study examined school, county and town taxes.

The DNR purchases remove land from the tax rolls, so revenue collections by the school district, county and town will decline. On the other hand, the decline in tax base means a decline in equalized value per pupil, so the school district will receive more state school aids than it would if the DNR lands were on the tax roll. The town will receive payments in lieu of taxes from the DNR, which may, or may not, offset the town's revenue loss. For all lands acquired after July 1, 1969, the DNR payment is made on a declining basis. The first year payment is equivalent to the full property tax that would have been collected for the land if it were still on the tax rolls. In the next year the DNR pays 90% of that amount, 80% in the third year, 70% in the fourth year, and so on, declining to the 10% level, or 50 cents per acre, whichever is greater; payments in all subsequent years are made at this level. It is important to note that the full amount goes to the town; none is distributed to the county or school district.

Town of Commonwealth, Florence County. In June, 1982, the DNR purchased 606 acres of land in the Town of Commonwealth in Florence County. The land had been valued on the 1982 tax rolls (full value) at \$135,439. In 1982, the previous owner paid \$1,705 in property taxes (tax levied in 1981, paid in 1982). The effect of the DNR purchase can be estimated by assuming that these lands were not on the tax roll in 1981 and calculating how local people's 1981-82 tax bills would have been different.

School taxes would have changed very little. About \$1,220 in school taxes was paid for the land in 1982, and this amount would be lost to the school district if DNR had owned the land. But if the land were in DNR ownership the equalized value per pupil in the school district would have been lower and the district would have received \$1,134 more in school aids. The school tax rate would have remained at \$9.01 per \$1,000 full value. (The actual increase in tax rate would have been seven one-hundredths of one cent per \$1,000 full value.)

The county tax rate of \$3.47 per \$1,000 full value would have increased slightly, by about one-third of a cent per \$1,000 full value. The county would have lost \$470 in property taxes from the land and would not have gained any in-lieu payments. Although the county's shared revenues payment from the state would have increased slightly, this positive effect of DNR purchase was ignored. The effect on the county is very slight in any case.

The town tax for Commonwealth would have been affected more significantly. The land was taxed only \$15 by the town in 1982. Thus if DNR had owned the land in 1981, the town would have lost \$15 in tax revenue. But under DNR ownership the town would have received a first-year payment in-lieu of taxes of \$1,705, an amount greater than the entire town tax levy of \$1,210 for that year. Thus the town would have eliminated its

tax levy altogether, reducing its tax rate from 11 cents per \$1,000 full value to zero, and would have had \$495 left over to reduce the other levies for property owners or to add to its operating balance. If the town used the surplus to offset other levies, the additional tax rate reduction would have been 4.4 cents per \$1,000 full value. So the total effect on the town tax rate would be a decrease of about 15.4 cents per \$1000 full value.

The combined effect of the changes in school, county and town tax rates is a decrease in the total tax rate of 15.0 cents per \$1,000 full value.

The decrease in the combined school, county and town tax rates will be partially offset by reductions in state shared taxes and tax credits equivalent to about 2 cents per \$1000 full value. The final effect, after all changes in these state payments, would be a decrease in the total tax rate of about 13¢ per \$1000 of full value.

Thus, if the lands had been purchased by the DNR, the taxes of local people would have declined. The owner of a home in Commonwealth with a full market value of \$50,000 would have paid about \$6.50 less tax in 1981-82. The actual tax bill for a \$50,000 home, was about \$629.

If the lands had been cut off the tax rolls in 1981, local people would have paid less property tax. This result may seem surprising since we usually think that a lower tax base means higher tax rates. There are several reasons for this result. First, although the school district loses property tax revenue, it gains almost as much in state aid since the tax base per pupil has declined. The change in the county tax rate is slight because the loss in property tax revenue is spread over the county's relatively large tax base. The town collected very little town tax on the property, so loses very little tax revenue. On the other hand the town receives an in-lieu payment which initially is equal to the total tax

levied on the land by the schools, county and town. Thus, the school tax rate increases very little because of the increased state school aid, the county tax rate increases very little because of the large tax base, and the town tax rate declines substantially because it loses little revenue but gains a relatively large in-lieu payment.

But the DNR payment declines over the years. Will this change the results? The answer is "no." If the DNR payment were at the minimum 50 cents per acre, the town tax rate would still decline, but only by 2.6 cents and the combined rate would decline by 2.2 cents per \$1,000 full value. The owner of the \$50,000 home would pay \$1.10 less in property tax even if the in-lieu payment were at its lowest level.

Town of Fern, Florence County. A similar study was carried out in the Town of Fern, involving 1,900 acres purchased by the DNR over the previous decade. The study asked: What would happen to the 1981-82 property taxes of local people if these lands had been sold by the DNR and returned to the 1981 tax roll?

To answer this question we had to know how the DNR land would have been assessed if it were on the tax roll. In 1981, the average full value of forest land in the Town of Fern was \$305 per acre (assessed value was \$85 per acre on average). We might expect land bordering the wild rivers to be more valuable than other forest land in the town, even though the evidence from Commonwealth is that these lands were assessed at a slightly lower value than other forest land (\$223 per acre for wild river lands vs. \$295 per acre for all forest land in Commonwealth). We assumed that the wild river lands would be valued at double the average for other forest land in the town.

So, the estimate of the tax base change if the DNR lands were returned to the 1981 tax roll was \$1,159,000. The tax base of the Town of Fern for 1981 would increase by 15.3%.

The school tax rate would change very little, even with such a large increase in tax base in Fern. The district would have collected \$10,433 in tax revenue from the land, but would have lost \$9,701 in school aids because equalized value per pupil in the district would have been higher than it was otherwise. The school tax rate of \$9.01 per \$1,000 full value would have declined by six-tenths of one cent per \$1,000 full value.

County taxes would have declined because the county would have gained \$3,987 in tax revenue if the wild river lands were on the tax rolls and would not have lost any in-lieu payment. The county's state shared revenue payment would decline slightly, but this was disregarded. The county tax rate would have declined from \$3.47 to \$3.44 per \$1,000 full value.

The town tax rate would have increased from 14 cents to 48 cents per \$1,000 full value if the DNR lands were on the tax rolls. In 1982 the town received \$3,134 from the DNR in lieu of property taxes for the 1,900 acres of DNR land. If the land were on the tax roll, the town would have lost this payment and would have had to recover the revenue by increasing its levy by \$3,134. Of that amount, about \$552 would be raised from the "former DNR land", but the balance, \$2,582, would have to be made up by raising the property tax on all other property in the town. Due to its high per capita valuation, Fern does not receive an "aidable revenues" payment from the state; thus its shared revenues payment would not increase in response to its increased town levy.

The combined effect of the changes in school, county and town tax rates is an increase in the total tax rate of 30.5 cents per \$1,000 full value. The overall increase in the tax rate will be offset by an increase in state tax credits equivalent to a tax rate change of about 2 cents per \$1000 full value.

Thus, if the DNR Wild River Lands in the Town of Fern had been returned to the tax roll, the taxes of local people would have increased. The owner of a \$50,000 house would have paid \$14.25 more property tax in 1982, an increase of about 2.3% over the actual 1982 tax bill of about \$631.

DNR payments decline over a 10-year period, dropping each year by 10% of the first year's payment; however in no case may payments fall below 50 cents per acre. Will lower payment levels change the results? The answer is "no." If the DNR payments to Fern were 50 cents per acre instead of \$1.65, the effect of returning the DNR land to the tax roll would still mean an increase in the overall tax rate of 5.5 cents per \$1,000 full value. The owner of a \$50,000 house in Fern would have paid \$2.76 more in property tax.

The Wild River Lands in the Towns of Commonwealth and Fern do not mean higher taxes for local people. In fact, returning the land to the tax roll would cause local property taxes to increase. Yet obviously the land would generate tax revenue if it were on the tax roll, so if local people do not pay for this loss of revenue, who does? Basically, all taxpayers in the state pay through state school aids and in-lieu payments. The Wild River Lands do have a tax cost, but that cost is borne statewide, not locally.

A study in 1982 of the proposed Joel Marsh Wildlife Area produced results similar to those for Florence County. The Joel Marsh project would enable DNR to buy 1222 acres in Polk County—910 acres in the Town of Beaver and 312 acres in the Town of Clayton. The land is currently taxed and in 1981 had a full value of about \$265,500 and taxes (payable 1982) of \$4,928.

To assess the impact of the proposed acquisition on local taxes we estimated 1981 taxes (paid in 1982) in Beaver and Clayton on the assumption

that the entire 1222 acres was owned by the state in that year and compared these results with actual taxes levied in 1981 that local people paid in 1982. Since the DNR payment in lieu of property taxes declines over the first 10 years, we estimated the impact based on the maximum in-lieu payment level (first year) and the minimum payment level (10th year and thereafter). At both levels and for both towns the impact on taxes was relatively minor.

Town of Beaver, Polk County. The 910 project acres in the Town of Beaver had a 1981 full value of \$225,630; taxes on the land in 1981-82 were \$4,118. If the land had been acquired by the state in 1980, so that it would not have been on the 1981 tax roll, the town would have received an in-lieu payment for 1981-82 of \$4,072. This payment would decline each year by 10 percent (\$407.20) and would reach the minimum payment of \$455 (50 cents per acre) by the tenth year. In the study, both payment levels were considered.

The project land in Beaver is in the Turtle Lake School District. If the district's 1981 full value was lower by \$225,630, it would have lost \$2,665 in school taxes; however it would have received \$2,624 more in school aids, so the loss of the tax base would not affect the school tax rate at all.

The county tax base loss due to the proposed project would amount to \$265,569 in 1981, corresponding to the project acreage in both Beaver and Clayton. Based on the 1981 county tax rate of \$3.07 per \$1000 of full value, the tax loss to the county would be about \$814. The county would receive a small increase in its shared revenue payment, due to its lower per capita valuation, but we have not included this impact in the analysis. Thus, the \$814 would be spread over the county's 1981 valuation of \$780 million, resulting in a tax rate increase of one-tenth of one cent per

\$1000 of full value, so the county rate of \$3.07 would be essentially unchanged.

The town would lose tax revenues from the loss of \$225,630 in tax base. Based on the town's 1981 tax rate of \$1.88 per \$1000 full value, the tax revenue loss would be \$424. However the town would receive \$483 more in shared revenue payments from the state due to its lower per capita valuation. In addition, the town would receive the DNR in-lieu-of-tax payment, which in the first year would be \$4,072; by the 10th year, this payment would have declined to \$455. In either case, the combination of increased shared revenue payments and the in-lieu payment would more than offset the loss of tax revenue. Thus, the town's tax rate would decline as a result of the acquisition, from \$1.88 per \$1000 to \$1.69 per \$1000 if the higher DNR payment is considered, or to \$1.86 per \$1000 at the lower DNR payment level. The result of summing the school, county and town impacts is a reduction in Beaver's total tax rate of 19.3¢ per \$1000 full value at the higher DNR payment level and a reduction of 2.4¢ per \$1000 full value at the lower payment level. State tax credits to Beaver would not change. For an owner of a \$50,000 house, the net effect of the proposed DNR purchases would be a \$10 decrease in the property tax bill from \$827 to \$817, at the higher payment level. The owner's tax bill would decline by \$1.20 at the lower payment level.

Town of Clayton, Polk County. The DNR would buy 312 acres for the Joel Marsh Wildlife Area in the Town of Clayton. This land had a 1981 full value of \$39,939 and total taxes on the land in 1981-82 were \$864. If the land had been off the tax rolls in 1981, the town would have received an in-lieu-of-tax payment of \$856 in the first year, declining the 10th year to \$156 representing 50¢ per acre. The effects of the DNR purchase were estimated at both payment levels.

Clayton is the Clayton School District. In 1981, the district had a full valuation of about \$35 million and a tax rate of \$16.41. If the school district's value had been reduced by the value of the project acreage, it would have lost about \$655 in school taxes. However, its general school aid payment would have been higher by about \$450. The net effect on the district's tax rate would be an increase of six-tenths of one cent per \$1000 full value (0.6¢). The effect of the proposed acquisition on Polk County's tax rate is, as we noted for Beaver, an increase of about one-tenth of one cent (0.1¢) per \$1000 of full value.

Based on the tax rate for town purposes of \$1.89 per \$1000, the loss of \$39,939 of value (312 acres) would amount to about \$76 in lost property taxes. However, the town's shared revenue payment would increase by about \$72, due to its lower per capita value. In addition, the town would receive a DNR in-lieu-of-tax payment of \$856 in the first year after the acquisition, declining to \$156 by the 10th year. Based on the higher payment level, the proposed acquisition would result in a reduction in the tax rate for town government purposes of 4.0¢ per \$1000 full value; based on the lower payment, the rate would also decline, but by only seven-tenths of one cent (0.7¢) per \$1000 full value. Summing the school, county and town tax rate changes, the total tax rate would decline by 3.3¢ per \$1000 at the higher payment level, but would not change at all at the lower level. Tax credits to the town would not change. Thus, the impact of the proposed acquisition on the owner of a \$50,000 home in Clayton would be a property tax reduction of \$1.65 at the higher payment level, and no change at the lower payment level. The actual tax on a \$50,000 home in Clayton in 1981-82 was about \$1008, so the DNR purchase would have little effect, regardless of the level of the in-lieu payment.

Other Studies. The results for Florence and Polk Counties are similar to those from other counties. For example a detailed study of DNR purchases in the Governor Knowles State Forest (formerly St. Croix River State Forest) analyzed tax impacts in seven towns in Burnett and Polk Counties. In each of the seven towns, the DNR purchases meant lower taxes for local taxpayers. Finally, a study of a hypothetical DNR land purchase in each of nine towns in nine different counties in 1975 showed that a DNR land purchase would have decreased local taxes in each case.

In general, DNR purchases decrease tax rates significantly for the first few years. This favorable effect is gradually reduced as the DNR in-lieu payment declines. After six or seven years the impact of DNR lands is similar to that of other public land programs--very little change in the tax rate. Whether the tax rate is slightly higher or lower depends basically on the difference between what the town would receive as its share of the property tax when the land is on the tax roll and the amount of the in-lieu payment if the land is off the roll.

In general, the total tax impact of a DNR acquisition can be anticipated from the way it affects the tax rate for town government. Since towns receive the entire DNR payment, whereas they retain only about 6% of their property tax collections, it is not uncommon to find that DNR acquisitions will actually reduce the property taxes of town property owners.

Federal Lands

In recent years the National Park Service (NPS) has been purchasing land in the Apostle Islands for the National Lakeshore and along the St. Croix-Namekagon Rivers for the National Scenic Riverway. A study of the effect of NPS purchases on local taxes was conducted in Washburn County in 1975 and updated in 1982. The results show, once again, that public land has very little effect on the property taxes of local people.

By 1975, NPS had purchased 685 acres in the town of Springbrook and had easements on an additional 494 acres. If the purchased acreage had been on the tax rolls in 1974, it would have been valued at about \$260,000, equal to 10% of the equalized valuation of the entire town in that year. To study the impact of Scenic Riverway acquisitions on property taxes in Springbrook, we assumed that the entire \$260,000 acquisition was put back on the 1974 tax rolls. Then we asked: How would taxes have differed in 1974 if this land were still on the tax rolls?

In 1974 there were no payments to local governments for National Park Service land. Thus, if the NPS land were returned to the tax rolls, no in-lieu payments would be lost. Nevertheless, the study showed that if all the NPS lands were returned to the tax rolls, the property taxes of Springbrook property owners would have been lower by only 1.1 cents per \$1,000 of valuation, equal to 55 cents for the owner of a \$50,000 home. The school tax rate would have declined by 0.2 cents per \$1,000, the county rate would have declined by 1.0 cents per \$1,000, and the town rate would have declined by 0.5 cents per \$1,000. The combined decrease of 1.7 cents would have been partially offset by a reduction of 0.6 cents in the amount of shared taxes and tax credits which Springbrook received from the state. Thus, the 1975 study concluded that even though the National Park Service did not provide in-lieu-of-tax payments at that time, the effect of Park Service land on local taxes was very small.

In 1976 Congress enacted a new program, providing for payments in-lieu of taxes for Park Service properties: (a) a payment of 1% of the market value of the land and improvements at the time of federal purchase, made each year for five years after acquisition and distributed to town, county and school districts in proportion to their share of the property tax and (b) a payment each year to the county of 75 cents per acre of "entitlement land."

We decided to restudy the tax impact of Park Service acquisitions in Springbrook on the assumption that the new federal payment programs were already in effect in 1974. Thus, the total in-lieu of tax payments to the county for this acreage is about \$1,650 during 1977-81 and about \$514 per year thereafter.

Originally we found that the NPS purchase had increased taxes in Springbrook very slightly. Had the federal payment program been in effect in 1975, returning the properties to the tax rolls would have had no effect on local taxes. The tax rate for the school district would still have declined by about 0.1 cents per \$1,000 full value since the federal in-lieu of tax payment of \$3,000 would be offset by an equal decline in school aids. The county tax rate would have been unchanged if the Park Service properties were restored to the tax rolls because the gain in taxes would be fully offset by the loss of in-lieu payments. In the absence of federal payments we found the county tax rate to be higher by 1 cent per \$1,000 full value as a result of the Park Service acquisitions. Finally, the tax rate for the town would have been higher by 0.5 cents per \$1,000 full value if Park Service properties were restored to the tax rolls and in-lieu payments were lost. The sum of these tax rate effects for school, county and town is very close to zero, leading to the conclusion that National Park Service acquisitions have not adversely affected local taxes in Washburn County.

Forest Crop Law

The state's Forest Crop Law exempts certain privately-owned forest land from the property tax as part of a program to encourage good forestry practices. This land is, in effect, removed from the tax rolls and local people often wonder if this leads to higher property taxes for them. We conducted studies of actual Forest Crop entries in several counties,

including Vilas and Washburn, and studied the tax effect of hypothetical entries in Wood, Marinette, Langlade, Barron, Florence, Sawyer and other counties. The effects were similar in every case--the Forest Crop program has little effect on property taxes of local property owners. An example from Washburn County illustrates the results.

In the Town of Minong in Washburn County the Mosinee Paper Company has about 12,500 acres enrolled under the Forest Crop Law. Since these lands were enrolled before 1972, Mosinee pays only 10 cents per acre per year to the town treasurer; the State contributes 20 cents per acre. Of the total, the town retains 80% and distributes 20% to the county. Thus, the Town of Minong had been receiving about \$3,000 per year as its share of the Forest Crop Law proceeds from the Mosinee land. If this land had not been under the Forest Crop Law it would have been taxed about \$23,000 in 1978. However, the town's share of the tax would have been less than 4%, or about \$870, since most of it is levied by the county and school district. The in-lieu payment (\$3,000) to the town far exceeds the tax revenue the town would receive (\$870) if the land were on the tax rolls. Forest Crop Law entries, even at the relatively low 10 cents per acre payment level are not likely to have an adverse effect on taxes in towns with low forest land values and low tax rates for the town government.

In 1978, Nekoosa Papers entered 320 acres in the Town of Minong under the Forest Crop Law. The entry became effective as of January 1, 1979. To study the tax impact of that entry on taxes in Minong we asked the question: How would 1978 taxes for property owners in Minong have differed if Nekoosa's 320 acres were already under the program during 1978? Thus, we recomputed 1978 taxes for the town on the assumption the Nekoosa lands were under the Forest Crop Law in that year and not on the tax rolls, and compared the result with actual 1978 taxes. We found that there would have been no noticeable difference.

The tax rate for the school district would have been higher by a very small amount, three one-hundredths of one cent per \$1,000 of equalized valuation. The effect on the school tax would be negligible because the loss of school taxes of about \$390 would be offset by a \$370 increase in state school aids. The tax rate for the county would also be higher by a very small amount, five one-hundredths of one cent per \$1,000 of equalized valuation. The loss in county taxes would amount to about \$135, but the county would receive \$26 as its 20% share of the 40 cents per acre Forest Crop Law payment, (20 cents from the owner and 20 cents from the state). The net loss to the county of \$109 is spread over Washburn county's total tax base of \$250,000,000 so the effect on the county's tax rate would be insignificant. The tax rate for the town would have been lower by about four-tenths of a cent per \$1,000 of equalized valuation if the Nekoosa acreage had been under the Forest Crop Law in 1978. Although the town would lose about \$20 in property taxes for the 320 acres, it would gain \$102 in Forest Crop Law payments.

The net effect of the changes in school, county and town tax rates would be a decrease of 0.3 cents per \$1,000 full value. The drop in taxes would trigger a slight decrease in state shared taxes and tax credits which would have the effect of cancelling about one-third of the tax rate decline. The final effect of the Nekoosa entry would thus be a decline of 0.2 cents per \$1,000 full value, which would hardly be noticeable by property owners. In the Town of Minong, taxes on a \$50,000 home would be about 10 cents lower.

From the Minong analysis, and from others we have done of the tax impact of the Forest Crop Law, we conclude that entries under that program do not, in general, cause local taxes to increase, and in many cases small tax decreases are observed. Beginning in 1983, the annual payment for land

entered under the Forest Crop Law between 1973 and 1982 will increase from 20 cents to 74¢ per acre. When that happens, the effect on taxes of the Forest Crop Law, and the Woodland Tax Law as well, will be even more favorable to other property taxpayers in the town.

Woodland Tax Law

The Woodland Tax Law is designed to promote good forestry practices on parcels too small to be entered in the Forest Crop Program--parcels 10-39 acres or parcels less than a full government lot description. Land entered in the program is exempt from local property taxes, but the owner pays either 20 cents or 40 cents per acre, depending on when the lands were entered under the program. Local people often ask whether this tax relief for woodland owners means higher property taxes for other local people. Studies of the effect of the Woodland Tax Law were made in Pepin and Iowa Counties and the effect of hypothetical entries was studied in nine other counties. The results in all cases were similar--the Woodland Tax Law has very little affect on local property taxes. A case from Iowa County in 1981 illustrates the basic points.

In 1981 in the Town of Ridgeway in Iowa County about 1331 acres were under the Woodland Tax program. We asked: "Would property taxes have changed much if this land were on the tax rolls in 1980?" We assumed that the land was placed on the tax rolls with a total value of \$564,350, based on an average full value of forest land in the Town of Ridgeway in 1980 of \$424 per acre.

The Town of Ridgeway is located in two school districts, Barneveld and Dodgeville. We assumed that one-half of the Woodland Tax land was in each school district because more detailed data were not available. In both districts there would be little change if the Woodland Tax land were returned to the tax rolls. The Dodgeville school district would collect

\$2,844 in extra tax revenue but would lose \$2,815 in state school aids. The Barneveld school district would gain \$4,286 in tax revenue but lose \$4,068 in school aids. In both cases the school tax rate would decrease less than one-half of one cent from the actual rates of \$10.08 in Dodgeville and \$15.19 in Barneveld, per \$1,000 full value.

Iowa County would gain \$2,580 in tax revenue but would not lose any in-lieu payments since the total Woodland Tax in-lieu payment is retained by the town. The county tax rate would decline by two-tenths of one cent, from an actual rate of \$4.57 per \$1,000 full value. The Town of Ridgeway would gain \$560 in tax revenue but would lose \$496 in in-lieu payments for a net gain of only \$64. The town's tax rate would decline two-tenths of one cent from the original rate of 99 cents per \$1,000 full value. A decline in state tax credits (property tax relief) would wipe out some of the initial decline in tax rates.

The overall effect on taxpayers in the Town of Ridgeway would be very slight. For those town residents in the Dodgeville school district, the owner of a \$200,000 farm would pay 74 cents less property tax (actual 1981 taxes about \$3,129) if all Woodland Tax lands were returned to the tax roll. An owner of a \$50,000 house would pay 19 cents less tax, out of an actual tax bill of about \$782. In the Barneveld school district the owner of a \$200,000 farm would have paid \$1.48 less tax (actual taxes paid in 1981 about \$4,153) and the owner of a \$50,000 house would have saved about 74 cents out of a tax bill of about \$1,038.

It is clear that the Woodland Tax Law does not mean higher property taxes for property owners in the Town of Ridgeway in Iowa County. This same conclusion was drawn in all of the other studies of the Woodland Tax Law. After 1983, when the payment for Woodland Tax lands entered after 1977 increases from 40¢ per acre to \$1.49 per acre, the effect on property taxes will be even more favorable for local property owners.

CONCLUSION

Many Wisconsin citizens believe that public land, or private land in the Forest Crop or Woodland Tax programs, means higher property taxes for people in the area. They reason that since these lands are removed from the tax rolls, local people must pay higher taxes to make up for the tax revenue not collected on the tax-exempt lands. These beliefs are not supported by the factual evidence.

The conclusions from studies in many Wisconsin towns, over many years, show that increases (or decreases) in the amount of public land have very little effect on property tax rates and the taxes of local property owners. The same conclusion applies to private tax-exempt land such as forest land in the Forest Crop and Woodland Tax programs.

Studies have been conducted, and examples given here, for County Forests, state lands managed by the Department of Natural Resources (DNR), National Park Service lands and private lands entered in the Forest Crop and Woodland Tax programs. Dozens of other examples can be cited, all with the same conclusion: these public land or private tax-exempt land programs have very little effect on local property taxes. Other studies have been made of the property tax impact of other types of public land such as lands used as a county farm or National Forest land. The conclusion has always been the same: increasing or decreasing the amount of public land has little effect on property tax rates and the taxes of local property owners. The occasional exception is that land purchased by the DNR often results in lower taxes for local people in the first few years after purchase; after 10 years, the effect of DNR land on property taxes is extremely slight. And, in all of the studies, it was assumed that the sale or purchase of

public land did not bring extra costs to local government. If public land were sold to people who built second homes or cabins, towns might need to provide more roads, snowplowing, or other public services, which would tend to increase property taxes.

Public land does not change tax rates because: (1) lower tax base means increased school aids, which offset most school tax revenue lost; (2) payments to towns in lieu of property taxes offset losses in town tax revenue, and may even provide extra revenue to the town; (3) the county or vocational district tax rate does not change much because the tax base is extremely large; (4) payments for state shared revenues and property tax relief may increase as a result of the increase in tax exempt land.

Increases in the amount of public land in a town do not change tax rates for local people. Yet this land was once paying taxes, so who makes up for the loss? The state makes up much of the loss, through increased school aids, in-lieu payments, shared taxes, and tax credits. The money for these state payments comes from state income taxes, sales taxes, and other general revenue sources. Thus, everyone in the state pays a very small amount of the costs of public lands. The general public pays the costs, which seems reasonable, since the general public benefits from public lands. The property tax system guarantees that local people do not pay the costs of public land programs through higher property taxes.

But what does this mean for local government? It means that local government officials do not need to be concerned that public land will mean higher property taxes for local residents. Local citizens and elected officials should make decisions about public land programs according to how it affects their economy, their environment, and the type of community they want. Decisions about public lands should not be based on an imagined tax effect, since the impact on property taxes will be quite insignificant.

REFERENCES

The studies described in this bulletin are available in more detail in the following sources:

- Barrows, Richard and Monroe Rosner, Public Land and Property Taxes, Research Report R2794, College of Agriculture and Life Sciences, University of Wisconsin, Madison, 1976.
- Barrows, Richard L., "Property Taxes and the County Forest in the Town of Blaine, Burnett County," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1975.
- Barrows, Richard L., "Property Taxes and the Marathon County Forest," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1976.
- Barrows, Richard L., "Property Tax Impact of the Woodland Tax Program, Town of Pepin, Pepin County," Staff Paper No. 108, Department of Agricultural Economics, University of Wisconsin, Madison, 1975.
- Barrows, Richard L., "Taxes and the County Forest in Eau Claire County," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1981.
- Barrows, Richard L., "Taxes and the Eau Claire County Forest," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1977.
- Barrows, Richard L., "Tax Effects of State Wild River Lands in Florence County," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1982.
- Barrows, Richard L., "Tax Effects of the Woodland Tax Lands on Town of Ridgeway, Iowa County," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1980.
- Barrows, Richard L., and Richard L. Stauber, Planning for Our County Forests, Extension Bulletin G2748, University of Wisconsin, Madison, 1975. (This study examines the effect of the county forests on the local economy and property taxes in Iron and Marinette Counties.)
- Harkin, Duncan, and Frank Mulholland, "Tax Exempt Land and the Burden of Taxation," working paper #5, Center for Resource Policy Studies, College of Agricultural and Life Sciences, University of Wisconsin-Madison, July, 1973.

Rosner, Monroe, H., and Richard L. Barrows, Public Land, Tax Exempt Land, and Property Taxes, Agricultural Experiment Station Bulletin R2774, University of Wisconsin, Madison, 1976. (This publication discusses the property tax impact of several types of public and other tax-exempt land in nine representative Wisconsin towns, 1974. Types of land include: county forests, national forests, DNR land, land in the Woodland Tax and Forest Crop programs, and land in programs making no payment in-lieu of property taxes.)

Rosner, Monroe H. and Richard L. Barrows, "Taxes and the County Forest in Douglas County," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1975.

Rosner, Monroe, H. and Richard L. Barrows, "Taxes and the Wild Rivers: Town of Lenroot, Sawyer County," mimeograph, Department of Agricultural Economics, University of Wisconsin, Madison, 1975.

Rosner, Monroe H., and Richard L. Barrows, "Who Pays for the Wild Rivers? The Effect of the National Park Service's Wild Rivers Program on Property Taxes in Washburn County," Staff Paper No. 110, Department of Agricultural Economics, University of Wisconsin, 1976.

DEPARTMENT OF NATURAL RESOURCES
DISTRICT OR BUREAU <i>S. Dist</i>
DNR NUMBER

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING WORKSHEET
(Attach additional sheets if necessary)

Title of Proposal: Mecan River System Fishery Area and Master Plan

Location: County Marquette and Waushara
Township North, Range East, West
Section(s)
Political Town Springfield, Newton, Crystal Lake, Marquette County
Coloma, Richford, Dakota, Waushara County.

Project:

1) General Description (overview)

It is proposed to create a named land acquisition and development project on the Mecan River System with an acreage goal of 5944.7 acres. The DNR currently owns 4704.3 acres which were purchased under individual named acquisition projects of the Mecan River, Chaffee Creek, and Wedde Creek, Waushara County remnant areas, and Marquette County remnant areas. The goals of the Mecan River Fishery Area are to obtain land control and to preserve and enhance the Mecan River System for trout fishing and other recreational and educational activities that are consistent with maintaining an aesthetically pleasing area.

2) Purpose and Need (include history and background as appropriate)

The purpose of this master plan is to provide plans for the long range acquisition, development, and maintenance of lands and public waters within the Mecan River System of Marquette and Waushara Counties. This is in accordance with the Natural Resources Board policy of developing master plans to reflect public interests and benefits that may be derived from the property and yet be consistent with its natural resources capabilities and wise use.

To avoid duplication and to correlate similar lands of a close geographical proximity, several properties have been combined into a single river system for master planning purposes. This master plan includes the Mecan River Fishery Area, ^{Chaffee Creek Fishery Area} Wedde Creek Fishery Area, Little Pine Creek Remnant Area, and Lower Mecan River Remnant Area.

Authorities and Approvals:

(continued on attached sheet)

1) Statutory Authority to Initiate

2) Permits or Approvals Required Natural Resources Board approval

3) Participants notified of above requirements? ☒ Yes ☐ No

4) Does this proposal comply with floodplain and local zoning requirements? ☒ Yes ☐ No

Estimated Cost and Funding Source:

Cost Estimate = 1,240 acres left to acquire at \$1000/acre = \$1,240,000.
ORAP, Lawcon, Trout Stamp, and General Operations funds.

Time Schedule:

Complete acquisition and development by the year 2,005. Routine maintenance will be scheduled as needed.

Mecan River System Fishery Area (Figure 2) for the long range acquisition, development and maintenance of lands and public waters as outlined in this master plan.

Approval is also requested of the Natural Resources Board to modify the combined previously approved boundaries of the Mecan River System Fishery Area as shown in Figures 3a. and 3b.. To establish this proposed boundary, the following actions will be necessary:

1. Expand the Chaffee Creek boundary to include the 160 acres shown as Parcel A, Figure 3b. This property contains approximately 3,200 feet of valuable Class II trout stream frontage.
2. Delete several non-essential parcels of the Chaffee Creek property which include: 40 acres shown as Parcel B, 80 acres shown as Parcel C, and 80 acres excepting the 3 rod right-of-way to the property boundary shown as Parcel D, all shown in Figure 3b.
3. Expand the Chaffee Creek boundary to include 30 acres of spring areas shown as Parcel E, Figure 3a.
4. Expand the Mecan River boundary to include 160 acres shown as Parcel F, 101 acres shown as Parcel G, and 40 acres shown as Parcel H, all shown in Figure 3b. These parcels contain approximately 4,000 feet of stream frontage.
5. Delete 44 acres shown as Parcel I, Figure 3a, presently within the Wedde Creek boundary. This parcel contains no stream frontage, is separated by a blacktop road from the rest of the property, and has been traded to a private landowner in exchange for other stream frontage land on Chaffee Creek.
6. Establish a property boundary on Little Pine Creek, currently a remnant, to become part of the proposed Mecan River System Fishery Area. Currently, there are 379.75 remnant acres under state ownership on this stream. It is proposed to create an acreage goal on this stream of 636.1 acres or 256.35 acres over the current remnant acres owned.
7. Transfer 636.1 acres from Waushara County remnant acres to the Mecan River System Fishery Area.
8. Reduce the acreage goal of Waushara County remnant acres by 636.1 acres.
9. Establish a Little Pine Creek Fishery Area, Waushara County.
10. Establish the acreage goal of the Mecan River System Fishery Area at 5,944.7 acres.
11. Acknowledge a modification of the property boundary which cannot be clearly defined on Figures 2 and 3b and includes the 20 acres shown as an indentation along the east boundary of the Mecan River, to Zinke Lake in the SE1/4 of Section 23, Township 18 north, Range 9 east.

EXISTING ENVIRONMENT

1) Physical (Topography-soils-water-air-wetland types)

WATER RESOURCES

The Mekan River is a hardwater spring fed stream that originates from a large spring area known as Mekan Springs. It flows southeasterly through Marquette County and into Green Lake County where it joins with the Fox River. The stream drains a total of 201 square miles of watershed and has an average gradient of 1.8 feet per mile.

Class I trout water exists from the headwaters downstream 6.6 miles to the 11th Road bridge with Class II trout water continuing downstream to Highway 22, (Figure 2). Although an occasional large trout is taken below Highway 22, this lower stretch of river more commonly supports a warmwater fishery. The Mekan River flows through a waterfowl ^{flavesc} flooding, the Germania Wildlife Area, before it enters the Fox River.

(continued on attached sheet)

2) Biological

a) Flora

VEGETATIVE COVER Due to the high diversity of land and soil types in the Mekan River system there is a corresponding high diversity of vegetative cover types ranging from lowland brush, grasses, and tamarack swamps to upland woods and fields (Figure 4.). Although forest reconnaissance has not been completed, the basic cover types and acreages are presented in Table 1. When the forest reconnaissance study is completed, this master plan will be updated.

Although Table 1 shows a total of 3654.4 acres of woods, most of the timber is composed of scrub oak and tamarack and is not of suitable quality to justify a large scale forestry

b) Fauna

(continued on attached sheet)

FISH AND WILDLIFE

Fish - The fish species composition is characteristic of a cold water fishery although several warm water species have been known to migrate upstream from the warm water areas of the Mekan River. A list of many of the fish species present in the Mekan River system was obtained through electro-fishing surveys and can be found in area files. Management is aimed specifically at brown, brook, and rainbow trout. Brown trout are the most abundant in waters of the fishery area. Natural reproduction areas range from excellent in many upstream areas to poor or none in downstream sections. Areas of little or no natural

3) Social

(continued on attached sheet)

The total acreage goal for this system is 5944.7 acres of which 4704.27 acres are already owned. The private land is utilized primarily for seasonal residences, recreation, permanent residences, forestry, and agriculture.

4) Economic

10% of the land within the boundary is suitable for agriculture. The remaining lands are used for forestry or recreation. The Mekan River systems draws anglers mostly from the southern and eastern parts of Wisconsin.

5) Other (include archaeological, historical, etc.)

HISTORICAL AND ARCHEOLOGICAL FEATURES

According to the State Historical Society, there are no known buildings in the project area that are considered to be of architectural importance; however, the Scientific Areas Preservation Council of the Department of Natural Resources recognizes 6 sites of noteworthy significance as listed in 2a) - Flora.

PROPOSED ENVIRONMENTAL CHANGE

1) Manipulation of Terrestrial Resources (include quantities – sq. ft., cu. yds., etc.)

Maintenance of the fishery resource will include rebrushing stream banks as nuisance brush regrows, maintaining existing habitat devices, posting boundary and parking lot signs, removing fallen trees and branches from parking lot areas, and policing litter.

Wildlife management will focus primarily on the maintenance of upland game habitat. Intensive management is not necessary since this area is already prime habitat for white-tailed deer and squirrel; populations of most other game species are adequate. Waterfowl production, however, is low to moderate; wood duck nesting boxes may help, but substantial oak wood lots already exist for these hole nesting ducks.

Sharecropping of appropriate state lands within the fishery area should continue. These fields provide food for a variety of animal species and keep edge and field openings within the forested areas. Along with the wildlife values, these fields

2) Manipulation of Aquatic Resources (include quantities – cfs, acre feet, MGD, etc.) (continued attach. sheet)

Stream habitat development for trout will be conducted on selected portions of the Mecan River System. This development will include installation of half logs, deflectors, boom covers, and artificial spawning beds. Stream bank brushing will also be done to remove excessively dense overhanging alder. In most cases, habitat development will not be intensive.

3) Structures

None

4) Other

None

5) Attach maps, plans and other descriptive material as appropriate (list)

Map attachments 1 - 4.

PROBABLE ADVERSE AND BENEFICIAL IMPACTS (Include Indirect and Secondary Impacts)

1) Physical Impacts

Water quality will not degrade, but steadily improve through good management. Land use will change to wildlife production. Additional parking lot areas and access trails will be developed as needed. Public use of the area will increase as well as the various problems related to increased pressure, i.e. litter, etc.

2) Biological Impacts

Management should provide increased protection and habitat for both game and non-game species. Hunting and fishing pressure will increase.

The proposed habitat improvement projects should improve the fishability of the various streams and increase the carrying capacity for trout. As a result, an improved trout fishery should occur.

3) Socioeconomic Impacts

a) Social

The area will provide recreational opportunity for both local people and non-residents.

b) Economic

Reduction of local tax base by this state land acquisition should have little or no effect on local taxes because increased aids will negate any reduction in tax base.

4) Other (include archaeological, historical, etc.; if none, so indicate.)

Any historical or archeological sites present on the property will be protected and remain undisturbed.

PROBABLE ADVERSE IMPACTS THAT CANNOT BE AVOIDED

Private ownership and use will no longer exist. A small acreage of agricultural land will be sharecropped or converted to recreational use. Several seasonal residences may be removed.

RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The purpose of this project is to provide a public recreational area and to maintain and increase the long-term productivity of the Mican River System.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES IF ACTION IS IMPLEMENTED

1) Energy

The energy required for any development would be consumed.

2) Archaeological and historic features or sites

None known. The Historical Society will be contacted before a major modification project is undertaken.

3) Other

None

ALTERNATIVES (No Action-Enlarge-Reduce-Modify-Other Locations and/or Methods. Discuss and describe fully with particular attention to alternatives which might avoid some or all adverse environmental effects.)

The basic management program for the Mekan River system calls for limited development of the property. The overall objective is to protect and preserve the natural aesthetics of the fishery area while providing a high level of recreational opportunity. The analysis of alternatives is as follows:

Do Nothing

If all management practices were halted, fish habitat would deteriorate in future years. Tag alder would encroach and cause deterioration of the stream channel. Streambank erosion problems would go uncorrected. Silt would cover up spawning beds and cause pools to become shallower. Trout carrying capacity would eventually become severely limited.

The wildlife habitat under this policy would remain relatively stable over a period of time before undergoing a gradual decline in population levels. Eventually, the quality of wildlife habitat and its carrying capacity would be reduced.

A policy of not acquiring additional public lands within the property boundaries would leave those private areas open to recreational subdivisions and the lowlands subject to drainage. This would have a negative impact on the water quality and the natural aesthetics of the area. Also, there would be no additional public access for recreational opportunities.

REDUCE, SELL, OR TRADE THE PROPERTY

The values of the property as a recreational area are related to the property's proximity to urban population centers. This area is within a one-hour drive of Stevens Point, Appleton, Oshkosh, and Portage, 1½ hours from Madison and Fond du Lac, and only 2½ hours from Milwaukee. In addition, the area is utilized by part-time and full-time residents of Marquette and Waushara Counties.

Attainment of the goals and objectives would be impossible if the area would be reduced. Also the policy of the Natural Resources Board discourages disposing of existing state properties with such values and uses as the Mekan River system.

ENLARGE PROJECT

Enlargement of the property boundaries beyond what is indicated in Figure 2 is not regarded as necessary. The integrity of the Mekan River system will be preserved and adequate public access will result with the present boundaries. It should be noted that several parcels were deleted from the Chaffee Creek area and several parcels of approximately equal acreage were added.

LIMITED HABITAT MANAGEMENT

Limited habitat management is necessary to maintain the present resource and prevent decline, particularly of the trout population. Instream structures would need periodic maintenance; brush tag alder areas would need rebrushing. Parking lots and access areas would require repair and periodic litter pick up. Present sharecropping practices would continue. Under this policy, the carrying capacity of fish and wildlife would not increase.

INTENSIVE HABITAT MANAGEMENT

In order to expand the fishing opportunities, extensive and intensive management of the area will be necessary. Stream improvement projects have been completed on portions of the Mekan River system. Additional stream bank brushing, erosion control, and instream structures are planned projects for the future (Figure 3). Maintenance of the existing structures and brushed areas will occur as needed.

Intensive management of the area for wildlife is not contemplated since it is already prime habitat for white-tailed deer and squirrel. Populations of ruffed grouse, raccoon, woodcock, and rabbits are adequate. Pheasant populations are low because the property is located in a very poor pheasant range.

EVALUATION (Discuss each category. Attach additional sheets and other pertinent information if necessary.)

- 1) As a result of this action, is it likely that other events or actions will happen that may significantly affect the environment? If so, list and discuss. (Secondary effects)

No

- 2) Does the action alter the environment so a new physical, biological or socio-economic environment would exist? (New environmental effect)

No

- 3) Are the existing environmental features that would be affected by the proposed action scarce, either locally or statewide? If so, list and describe. (Geographically scarce)

Trout streams are a limited resource in the southern area of Wisconsin.

- 4) Does the action and its effect(s) require a decision which would result in influencing future decisions? Describe. (Precedent setting)

No

- 5) Discuss and describe concerns which indicate a serious controversy? (Highly controversial)

None

- 6) Does the action conflict with official agency plans or with any local, state or national policy? If so, how? (Inconsistent with long-range plans or policies)

Buying this land is consistent with the State of Wisconsin's policy of acquiring stream frontage for the protection and preservation of the resources involved.

- 7) While the action by itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment? (Cumulative impacts)

No

- 8) Will the action modify or destroy any historical, scientific or archaeological site?

No

- 9) Is the action irreversible? Will it commit a resource for the foreseeable future? (Foreclose future options)

Buying this property will forever commit the resources to the State of Wisconsin and its people.

- 10) Will action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns? (Socio-cultural impacts)

No.

- 11) Other

None.

William R. Paul, Jr. M.P. EN

1378

AGENCIES, GROUPS AND INDIVIDUALS CONTACTED REGARDING THE PROJECT
Include DNR Personnel and Title

Date	Contact	Comments

RECOMMENDATION

EIS Not Required ☒

Analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion therefore, an environmental impact statement is not required before the Department undertakes this action.

Refer to Office of the Secretary ☐

Major and Significant Action: Prepare EIS ☐

Additional factors, if any, affecting the evaluator's recommendation:

SIGNATURE OF EVALUATOR
For Dale Biese - James Carleton
DATE 9/21/81

HEM 11-29-81

CERTIFIED TO BE IN COMPLIANCE WITH WEPA
DISTRICT OR BUREAU DIRECTOR (OR DESIGNEE) DATE

APPROVED (if required by Manual Code)
DIRECTOR, BEI
James Carleton
DATE 7/2/84

This decision is not final until approved by the appropriate Director and/or Director, BEI.

A detailed map of the Mecan River System Fishery Area. The map features a grid system with letters (A through S) along the top and bottom edges and numbers (1 through 21) along the left and right edges. The Mecan River is the central feature, flowing from the top left towards the bottom right. Major tributaries include the Rose River, Springwater River, and the Little River. Towns and locations marked on the map include Plainfield, Oasis, Rose, Springwater, Leon, Deerfield, Hancock, Field, Rich, Ford, Dakota, Marion, Warren, Aurora, and Bloomfield. The map also shows various lakes, such as Lake Marion, Lake Warren, and Lake Aurora. The title "MECAN RIVER SYSTEM FISHERY AREA" is prominently displayed in the center of the map.

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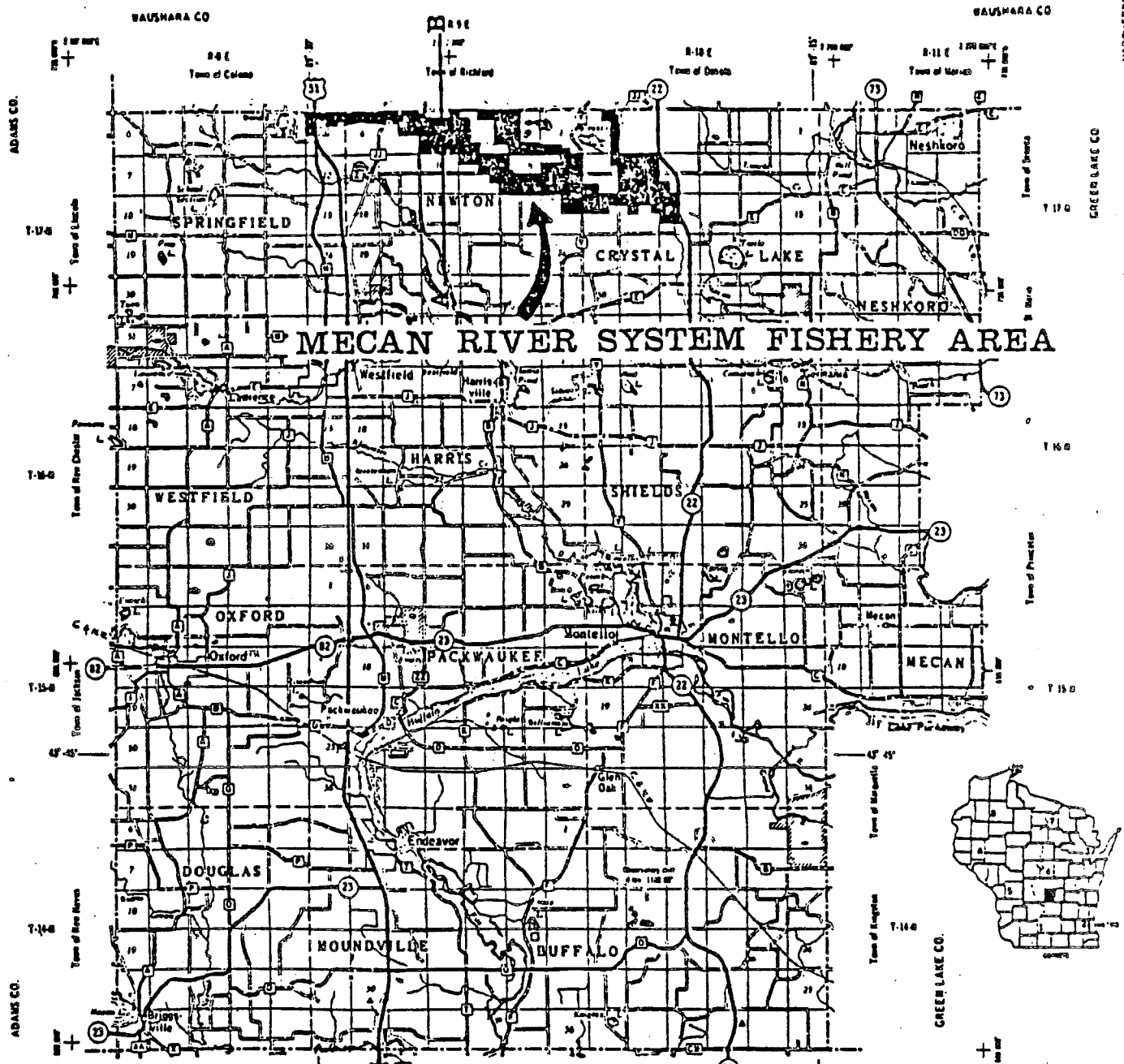


Figure 1b. Location-Mecan River System Fishery Area, Waushara and Marquette Counties.

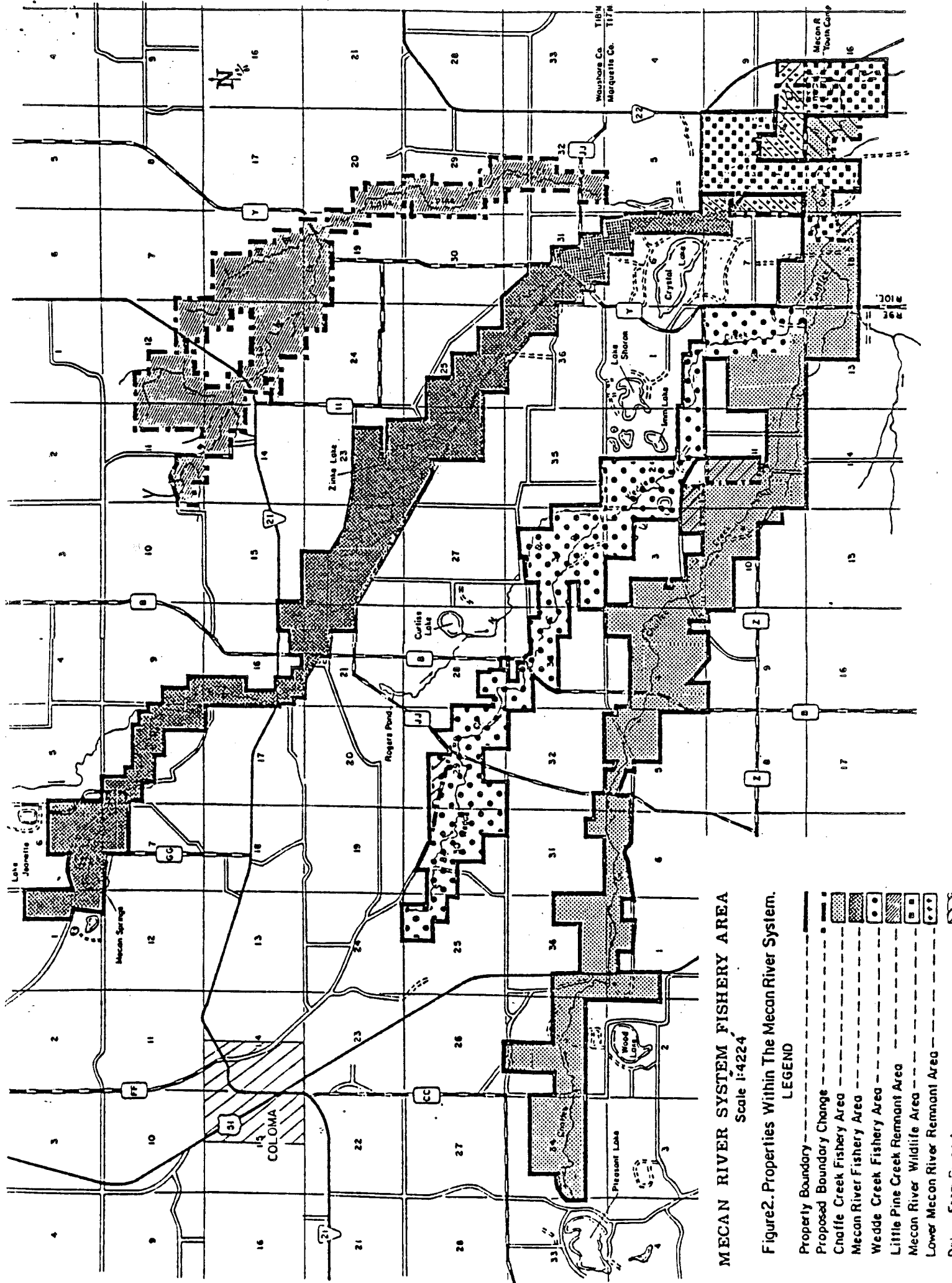
U.S. STATE	COUNTY
Portland Cement	U.S. STATE
Iron Ore	COUNTY
Barren	
Gravel	
Earth	
Timber Road	
Fire Lane	
Barren Ground	
Forest	
Interchange	
Highway Station	
Interstate Highway	
U.S. Highway	
State Highway	
County Map Letter	
Barren	
Barren	
State Boundary	
County Boundary	

CIVIL TOWNS			
SPRINGFIELD	NEWTON	CRYSTAL LAKE	NESHKORO
WESTFIELD	HARRIS	SHIELDS	
OXFORD	PACKWAUKEE	MONTELLA	MECAN
DOUGLAS	MOONVILLE	BUFFALO	

Land Area 107 sq. mi.
Population 1,500
City Area 100 sq. mi.

TOWNSHIP					
6	5	4	3	2	1
9	8	7	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
32	31	33	34	35	36

MARQUETTE CO.
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OFFICE BUILDING
JAN. 1976
SCALE 1" = 10 MILES
Compared to
JAN. 1976
Compared from U.S.A. Quality Index
Based on Actual Photographs



2) Purpose and Need, continued.

PROPERTY LOCATION

All of the properties within the Mekan River System are located in southwest Waushara County and northwest Marquette County. (Figure 1). These properties are approximately 70 miles north of Madison, 60 miles northwest of Fond du Lac, and 50 miles west of Oshkosh.

HISTORY OF PROPERTY

The Chaffee Creek Fishery Area was approved by the Wisconsin Conservation Commission in 1958 with an original boundary and acreage goal of 3259.95 acres. Although the boundary goal remained the same, the acreage goal was reduced to 2521.2 acres in 1970 and further reduced to 2421.2 acres in 1974. The initial purchase began with 160 acres in June, 1959. The most recent acquisition of 47 acres in January, 1981 brings the total land acquired to 2117.39 acres at a cost of \$338,029.40 (Figure 2).

The Wedde Creek Fishery Area was originally approved in 1958 with a boundary and acreage goal of 2324.52 acres. The acreage goal was cut to 828 acres in 1970 and then set at 840 acres in 1974. The first purchase on Wedde Creek was 238.5 acres in January, 1960. The last land transaction was a 44 acre divestment in January, 1981 which reduced the total acreage acquired to 489.6 acres at a cost of \$94,152.00.

The Mekan River Fishery Area was approved in 1957 with a boundary and acreage goal of 2492.58 acres. The acreage goal was reduced to 1307.5 acres in 1974. The initial purchase on the Mekan River began with a 278.84 acre purchase in December, 1958. So far, total public land acquisition amounts to 971.28 acres at a cost of \$139,627.63.

Project boundaries for the 3 fishery areas were never reduced because they were believed to be realistic boundary goals; however, due to a reduced availability of funds and to keep the total state-wide ownership goal at 1.3 million acres, acreage goals within these 3 fishing areas were reduced. Acreages taken from these projects were allocated to other DNR named acquisition projects.

Acquisition of the Mekan River Wildlife Area first started in 1944. The last parcel purchased in 1969 completed the project with a total of 739.9 acres, all of which are in fee title. Total land acquisition costs for this project came to \$15,599.50.

In 1961, the Wisconsin Conservation Commission approved the Waushara County Fish Remnant Habitat Project which today has an acreage goal of 3090.40 acres with 1821.91 acres acquired under this program. It is expected that most, if not all, of the 1268.49 acres remaining will be assigned to named fishery areas.

Although informal property maps existed since 1961, property boundaries for the Little Pine were not officially delineated and approved until 1976 with an acreage boundary of 1210 acres. In 1980, 250 acres from the Waushara County Remnant program were allocated to Little Pine Creek. Initial acquisition of public lands on Little Pine Creek under the remnant program began with a 10 acre purchase in 1962. Thus far, 386.1 acres have been purchased on this stream.

In 1961, the Wisconsin Conservation Commission also approved the Marquette County Fish Remnant Habitat Project which had an acreage goal of 1179.00 acres. Presently, all of the remaining acreage has been assigned to other named projects leaving this program with a total completed acreage of 897.48 acres.

Originally, the Mekan River Wildlife Area included the area now known as the Lower Mekan Fishery Area, but when funds and acreage goals within the wildlife program were prioritized more toward wetlands and waterfowl projects, the wildlife program for upland habitat at the Mekan River was considered complete. Maps delineating the boundaries of the Lower Mekan River Fishery Area were formally approved in 1976. So far, there has been no acquisition within this remnant area.

RECREATION NEEDS AND JUSTIFICATIONS

Since trout streams are a relatively scarce resource in southern Wisconsin, the protection, preservation and public access to these streams is of high priority. The opportunity to provide outdoor recreation in a natural environment close to large population centers is generally limited. The Mekan River system presently provides such recreation and with proper planning and management, this area will be protected and continue to provide quality recreation.

There are only 13 trout streams totaling 79 miles in Marquette County; for Waushara County there are 33 listed trout streams that total 151 miles. The property boundaries, however, are of close proximity to major population centers. Excellent highway access make the fishery area accessible to 1½ million people within one hour of driving time and to 3 million people within 3 hours of driving time.¹

The Mekan River system presently receives moderate to high fishing pressure throughout the fishing season. The Mekan River and Chaffee and Wedde Creek have a widespread reputation as high quality trout streams. With the ever increasing prices of gasoline and transportation, it is expected that fishermen will not travel extreme distances to pursue their fishing interests. This would undoubtedly increase the fishing pressure on areas such as the Mekan River system; therefore, management and development of the existing fishery area must remain a high priority if the resource is to be maintained and/or improved.

1. King, D. B. 1975. An Investigation of the Accessibility of Wisconsin Lakes and Streams. DNR Publication.

Recreational demand has risen dramatically over the last 10 years, and it is expected to increase significantly in the next 10 years. Private lands will be less available to the general public. As energy sources continue to rise in price, public recreational lands in southern Wisconsin will become increasingly important.

EXISTING ENVIRONMENT

1) Physical, continued

The three main tributaries within the Mekan River include Chaffee Creek, Wedde Creek, and Little Pine Creek. Table 2 gives the trout stream lengths and total lengths for these streams.

The water for all of the Mekan River system is usually clear, except during high runoff periods. Alkalinities and water conductance are relatively high. Table 3 lists various physical and chemical data for these streams.

TABLE 2. Stream lengths (in miles) for the Mekan River System.

Creek or River	County*	Class I Waters	Class II Waters	Total Trout Stream Length	Overall Stream Length
Chaffee	M,W	8.1	4.2	12.3	12.3
Little Pine	M,W	7.4	-	8.9**	8.9
Little Pine N. Fork	W	1.5	-	-	-
Mekan	M,W	6.6	9.6	16.2	41.3
Wedde	M	-	3.6	11.1**	11.1
Wedde, S. Br.	W	4.9	-	-	-
Wedde, N. Br.	W	2.6	-	-	-
TOTALS		31.1	17.4	48.5	-

* M - Marquette; W - Waushara

** Gives total for main branch and tributaries.

TABLE 3. Physical and chemical data for the Mekan River System.

Stream	Av. Width (ft)	Normal Flow (cfs)	Gradient (ft/Mi)	Drainage (sq.Mi)	Alkalinity (ppm)	Conductance (mmho)
Chaffee	13	11	6.8	13	154	300
Little Pine	4	4	2.6	9	166	289
Mekan	30	30	1.8	201	162	336
Wedde	13	6	4.8	11	150	285

Generally, the upper trout stream portions of the Mecan River system are Class I waters that are characterized by small pools and longer run riffle areas with adequate gravel for spawning and reproduction. Downstream portions of these streams have a predominantly sandy bottom with a higher pool/riffle ratio. Natural trout reproduction is low in these downstream areas.

Although some shoreline erosion and sluffing exists, streambanks provide cover and protection for the trout. Instream cover occurs in the form of logs, rocks, brush tangles, and water depth. Adequate cover, particularly for larger trout, is noticeably absent from some of the Class I areas. Instream vegetation is sparse throughout the Mecan River system. Some areas of dense overhanging alder grows along the stream banks.

SOILS, GEOLOGY, AND HYDROLOGY

Area soils are derived primarily from the weathering of glacial drift deposits which are products of glacial action on the underlying Upper Cambrian sandstone. Glacial action also brought material from crystalline rock further north so that the sandy soils here are somewhat more productive than the sandy soils found in the unglaciated central sand plains just west of Marquette and Waushara Counties.

Soil types in the area fall into 8 soil associations which include the Gotham-Mecan, Plainfield-Gotham, Delton-Briggsville-Mundelein, Granby-Tedrow-Moundville, Newton-Plainfield-Morrocco, Plainfield-Gotham-Wyocena, Nekoosa-Morocco-Granby-Plainfield, and Houghton-Adrian.

The soil associations Plainfield-Gotham, Plainfield-Gotham-Wyocena, Gotham-Mecan, and Nekoosa-Morocco-Granby-Plainfield, comprise 80% of the land area. These soils are generally noted as sand, sandy loam, or loamy sand of nearly level and undulating soils of broad outwash plains. These sandy soils are poor agricultural producers unless heavily irrigated and well fertilized.

The remaining soil associations are generally muck or peat soils of nearly level plains. These soils have a slower permeability rate and are poor agricultural producers unless drained.

The predominant sandy soils allow excess precipitation and melting snow water to readily percolate into the ground water which provides for an almost continual recharge of the ground water system. Numerous springs and artesian wells exist and account for stable stream flows within the Mecan River stream system.

2) Biological a) Flora

operation. Much of the timber that does exist occurs in scattered areas with poor accessibility. Management of the timber resource

will produce small amounts of lower grade timber products. Controlled cuttings will also produce relatively small volumes of firewood. Management of the wooded areas will be primarily oriented to wildlife production, streamside protection, and natural setting aesthetics.

Much of the lower quality farm land has been abandoned and is reverting to natural vegetation or has been planted to pine plantations (520.9 acres). Current forestry practices on these pine tree areas will produce a low volume of good quality timber in the future.

TABLE 1.* Acreages of Vegetative Cover Types

Acres of:	Chaffee Creek	Wedde Creek	Mecan River FA	Mecan River WA	Little Pine	Total
Lowland Brush	888.1	615.5	490.9	160.8	426.2	2581.5
Woods	1057.5	431.3	1205.6	350.2	609.8	3654.4
Upland Grasses	260.6	188.9	164.1	88.1	119.0	820.7
Pine	78.3	222.0	95.1	110.7	14.8	520.9
Fields	901.4	733.1	784.6	0	331.6	2750.7
Lowland Grasses	74.1	89.7	55.3	30.1	178.6	427.8
Total land Area (acres)	3260.0	2280.5	2795.6	739.9	1680.0	10,756.0

*Includes proposed changes in property boundaries.

Several areas containing significant vegetation types exist within the fishery area and are listed as follows:

1. Liberty Bluff - An outcrop of precambrian sandstone with ripple marks and an old second growth of white and red pine forest found in T17N, R8E, S. 1, W $\frac{1}{2}$ NW $\frac{1}{2}$.
2. Upper Chaffee Meadow - A high quality wet to mesic prairie and fen complex with a high diversity of plant species found in T17N, R8E, S. 1, NW $\frac{1}{2}$.
3. Lower Chaffee Meadow - A small fen with many native fen, prairie, and marsh plants present. This area is found in T17N, R9E, S. 13, N $\frac{1}{2}$ NE $\frac{1}{2}$.
4. Mecan Springs - A large clearwater springs wetlands area in the bottom of a moraine depression found in T18N, R8E, S. 2, N $\frac{1}{2}$ SE $\frac{1}{2}$ SE $\frac{1}{2}$.
5. Zinke Lake - A hardwater, spring-fed marl lake with a shoreline dominated by tamarack, found in T18N, R9E, S. 23, NE $\frac{1}{2}$ SW $\frac{1}{2}$ and SE $\frac{1}{2}$ SW $\frac{1}{2}$.
6. Crystal Lake Club Woods - A wooded area that contains large specimens of black, white and red oak and white, red, and jack pine along with stands of tamarack, alder, white birch, and red maples. This area is located in T17N, R10E, S. 6, SE $\frac{1}{2}$ NE $\frac{1}{2}$ and NE $\frac{1}{2}$ SE $\frac{1}{2}$.

It is recommended that Liberty Bluff be established as a Scientific Area; Mekan Springs, Zinke Lake, Crystal Lake Club Woods, and Upper and Lower Chaffee Meadows should be recognized as Public Use Natural Areas. These sites and any additional sites discovered on the property will be developed and managed only after consultation with the State Historical Society and the Scientific Areas Preservation Council.

2) Biological

b) Fauna

FISH AND WILDLIFE

reproduction are stocked to help support the heavily-used trout fishery.

Wildlife - A detailed listing of wildlife species is not available for the Mekan River system; however, it is known that a variety of non-game wildlife, typical of the central Wisconsin sand plains, inhabit the fishery area. Two species of particular interest are the sandhill crane and the bobwhite quail.

Wildlife habitat within the Mekan River system Fishery Area is of high quality for squirrels and white-tailed deer. Other species which can be managed for hunting or trapping include ruffed grouse, woodcock, raccoon, cottontail rabbit, red fox, muskrat, beaver, otter, mink, mallard ducks, and wood ducks. As mentioned previously, the Mekan Springs is used as an open water resting area for Canada geese.

ENDANGERED AND THREATENED SPECIES

Although a complete survey of all rare and endangered species has not been made, sightings of bald eagles and a red-shouldered hawk have been reported.

Pickeral frogs, a threatened species, may inhabit the headwater springs and seepage areas along any or all of the streams in this system; however, the presence of pickeral frogs has not been documented.

All areas of development will also be examined for the presence or absence of endangered and threatened species and appropriate protective measures will be taken for significant sites. If any sites are found during development, construction will be suspended until the Office of Endangered and Non-game Species (DNR) is consulted. The site(s) will be evaluated and protective measures taken for significant locations.

1) MANIPULATION OF TERRESTRIAL RESOURCES

add to the sharecropper's production and yield.

The refuge and closed area of the Mekan Springs should continue to serve as a satellite area for Canada goose populations. During the winter, giant Canada geese (Branta canadensis maxima) use the open waters for roosting and the Greenwood Wildlife Area, 2 miles north, for feeding.

As long as funds are available for operation and maintenance, the closed area of the Mekan River Youth Camp should remain. This facility provides an excellent opportunity for outdoor recreation and education while providing a source of manual labor for DNR work projects.

Management of the timber resources will be limited. Most of the wooded areas are scrub oak and tamarack and are of low timber value. Management of the existing pine plantations will produce a low volume of good quality lumber in the future.

Firewood permits will be issued on a limited and controlled basis. Management of the wooded areas will be primarily oriented to wildlife production, stream protection, and natural aesthetics.

Scientific and natural areas (Figure 3) will be managed to preserve and perpetuate these unique resources. Although intended for public view and use, protective measures will be initiated as necessary.

Public access to the fishery area is currently provided by 48 road crossings and 33 parking lot areas. Limited hiking, cross-country skiing, and snowmobile trails will be maintained or developed as demand arises. All such trails, however, must be compatible with the overall intent and purpose of the fishery area.

ALTERNATIVES

The Mekan Springs area has been managed as a satellite area for Canada goose populations. Overwintering giant Canada geese utilize the open water springs area as a roost and the Greenwood Wildlife Area for feeding.

Waterfowl production from the Mekan River system is low to moderate. Installation of wood duck nesting boxes along the stream may help increase production, but there are already substantial oak woodlots for these hole-nesting ducks. The DNR Southern District wildlife management program is aimed primarily at waterfowl and pheasants, but most of their effort is directed at larger wildlife areas where better results are obtained for the amount of effort expended.